

#### Instruction Sheet for Advance C Spoken Tutorial Team IIT Bombay



#### 1 Online / Offline content

- 1. The online content of Spoken Tutorials can be accessed from:
  - http://spoken-tutorial.org/tutorial-search/
- 2. You can also download the Spoken Tutorials for offline learning from : http://spoken-tutorial.org/cdcontent/
- 3. From this link download the FOSS categories in the language you wish to learn.
- 4. The Spoken Tutorial content will be downloaded as a zip file on your machine.
- 5. Extract the contents of the zip file & access them.

#### 2 The procedure to practise

- 1. You have been given a set of spoken tutorials and files.
- 2. You will typically do one tutorial at a time.
- 3. You may listen to a spoken tutorial and reproduce all the steps shown in the video.
- 4. If you find it difficult to do the above, you may consider listening to the *whole* tutorial once and then practise during the second hearing.
- 5. To learn Advance C, you should be familiar with basics of C, any text-editor and execution of C programs.

#### 3 Advance C

- Click on "Select FOSS" or "All FOSS Categories" drop-down and choose "Advance C".
- 2. Click on "Select Language" or "All Languages" drop-down and choose the language (English, Hindi, Marathi ...) in which you wish to learn.
- 3. Click on "Submit" button.
- 4. You will see a list of tutorials based on your selection.
- 5. Start with the first tutorial in the displayed list.

## 4 First tutorial: Command line arguments in C

- 1. Locate the topic Command line arguments in C and click on it.
- 2. To view the tutorial, click on the Play icon which is located in the player.
- 3. The Pre-requisite will be visible below the player (only for Online contents).
- 4. Outline, Assignments, Code Files and Slides are available below the player.
- 5. Adjust the size of the browser in such a way that you are able to practice in parallel.

### 4.1 Instructions to practise on Linux OS

- (a) The tutorials are explained on the Linux OS
- (b) It will be easy for the Linux users to follow, as instructed on the tutorial.

### 4.2 Instructions to practise on Windows OS

- (a) On Windows, one has to use "Command prompt" and "Notepad++ text editor" instead of "Terminal" and "gedit text editor".
- (b) To open the "Command Prompt" on Windows, press the "Windows" key and "R" key simultaneously on your keyboard. It will open the "Run" prompt.
- (c) At the prompt, type "cmd" and click on "0k".
- (d) This will open the "Command" prompt.
- (e) Notepad++ can be opened from Start >> Applications >> Notepad++.

#### 4.3 Instructions to practise

- (a) Create a folder on the "Desktop" with your "Name-RollNo-Component".(Eg. "ashwini-04-adv-c").
- (b) Give a unique name to the files you save, so as to recognize it next time.(Eg. "Practice-1-ashwini").

- (c) Remember to save all your work in your folder.
- (d) This will ensure that your files don't get over-written by someone else.
- (e) Save your work from time to time, instead of saving it at the end of the task.

### 4.4 Common instructions for Assignments

- (a) Attempt the Assignments as instructed in the tutorial.
- (b) Save your work in your folder.

### 4.5 Common instructions to use Code files

- (a) Click on the link "Code files" located below the player and save it in your folder.
- (b) Extract the downloaded zip file.
- (c) You will see all the code/source files used in the particular tutorial.
- (d) Use these files as per the instructions given in the particular tutorial.
- 6. Play-pause-practise the whole tutorial.
- 7. Once the tutorial is complete, choose the next tutorial from the playlist which is located on the right side or below the player.
- 8. Follow all the above instructions, till you complete all the tutorials in the series.



# Instruction Sheet for Advanced C++ Spoken Tutorial Team IIT Bombay



#### 1 Online / Offline content

- 1. The online content of Spoken Tutorials can be accessed from :
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- 3. From this link download the FOSS categories in the language you wish to learn.
- 4. The Spoken Tutorial content will be downloaded as a zip file on your machine.
- 5. Extract the contents of the zip file & access them.

#### 2 The procedure to practise

- 1. You have been given a set of spoken tutorials and files.
- 2. You will typically do one tutorial at a time.
- 3. You may listen to a spoken tutorial and reproduce all the steps shown in the video.
- 4. If you find it difficult to do the above, you may consider listening to the *whole* tutorial once and then practise during the second hearing.
- 5. To learn Advanced C++, you should be familiar with basics of C and C++, any text-editor and execution of C++ programs.

#### 3 Advanced C++

- 1. Click on "Select FOSS" or "All FOSS Categories" drop-down and choose "Advanced Cpp".
- 2. Click on "Select Language" or "All Languages" drop-down and choose the language (English, Hindi, Marathi ...) in which you wish to learn.
- 3. Click on "Submit" button.
- 4. You will see a list of tutorials based on your selection.
- 5. Start with the first tutorial in the displayed list.

## 4 First tutorial: Classes And Objects

- 1. Locate the topic Classes And Objects and click on it.
- 2. To view the tutorial, click on the Play icon which is located in the player.
- 3. The Pre-requisite will be visible below the player (only for Online contents).
- 4. Outline, Assignments, Code Files and Slides are available below the player.
- 5. Adjust the size of the browser in such a way that you are able to practice in parallel.

### 4.1 Instructions to practise on Linux OS

- (a) The tutorials are explained on the Linux OS.
- (b) It will be easy for the Linux users to follow, as instructed on the tutorial.

### 4.2 Instructions to practise on Windows OS

- (a) On Windows, one has to use "Command prompt" and "Notepad++ text editor" instead of "Terminal" and "gedit text editor".
- (b) To open the "Command Prompt" on Windows, press the "Windows" key and "R" key simultaneously on your keyboard. It will open the "Run" prompt.
- (c) At the prompt, type "cmd" and click on "0k".
- (d) This will open the "Command" prompt.
- (e) Notepad++ can be opened from Start >> Applications >> Notepad++.

#### 4.3 Instructions to practise

- (a) Create a folder on the "Desktop" with your "Name-RollNo-Component".(Eg. "ashwini-04-cpp").
- (b) Give a unique name to the files you save, so as to recognize it next time.(Eg. "Practice-1-ashwini").

- (c) Remember to save all your work in your folder.
- (d) This will ensure that your files don't get over-written by someone else.
- (e) Save your work from time to time, instead of saving it at the end of the task.

### 4.4 Common instructions for Assignments

- (a) Attempt the Assignments as instructed in the tutorial.
- (b) Save your work in your folder.

### 4.5 Common instructions to use Code files

- (a) Click on the link "Code files" located below the player and save it in your folder.
- (b) Extract the downloaded zip file.
- (c) You will see all the code/source files used in the particular tutorial.
- (d) Use these files as per the instructions given in the particular tutorial.
- 6. Play-pause-practise the whole tutorial.
- 7. Once the tutorial is complete, choose the next tutorial from the playlist which is located on the right side or below the player.
- 8. Follow all the above instructions, till you complete all the tutorials in the series.



# Instruction Sheet for Introduction to computers Spoken Tutorial Team IIT Bombay



#### 1 Online / Offline content

- 1. The online content of Spoken Tutorials can be accessed from :
  - http://spoken-tutorial.org/tutorial-search/
- 2. You can also download the Spoken Tutorials for offline learning from: http://spoken-tutorial.org/cdcontent/
- 3. From this link download the FOSS categories in the language you wish to learn.
- 4. The Spoken Tutorial content will be downloaded as a zip file on your machine.
- 5. Extract the contents of the zip file & access them.

#### 2 The procedure to practise

- 1. You have been given a set of spoken tutorials and files.
- 2. You will typically do one tutorial at a time.
- 3. You may listen to a spoken tutorial and reproduce all the steps shown in the video.
- 4. If you find it difficult to do the above, you may consider listening to the *whole* tutorial once and then practise during the second hearing.

#### 3 Introduction to computers

- 1. Click on "Select FOSS" or "All FOSS Categories" drop-down and choose "Introduction to computers".
- 2. Click on "Select Language" or "All Languages" drop-down and choose the language (English, Hindi, Marathi ...) in which you wish to learn.

- 3. Click on "Submit" button.
- 4. You will see a list of tutorials based on your selection.
- 5. Start with the first tutorial in the displayed list.

## 4 First tutorial: Getting to know computers

- 1. Locate the topic "Getting to know computers" and click on it.
- 2. To view the tutorial, click on the Play icon which is located in the player.
- 3. The Pre-requisite will be visible below the player (only for Online contents).
- 4. Outline, Assignments, Code Files and Slides are available below the player.
- 5. Adjust the size of the browser in such a way that you are able to practice in parallel.

### 4.1 Common instructions for Assignments

- (a) Attempt the Assignments as instructed in the tutorial.
- (b) Save your work in your folder.
- 6. Play-pause-practise the whole tutorial.
- 7. Once the tutorial is complete, choose the next tutorial from the playlist which is located on the right side or below the player.
- 8. Follow all the above instructions, till you complete all the tutorials in the series.



#### Instruction Sheet for Java Spoken Tutorial Team IIT Bombay



#### 1 Online / Offline content

- 1. The online content of Spoken Tutorials can be accessed from :
  - http://spoken-tutorial.org/tutorial-search/
- 2. You can also download the Spoken Tutorials for offline learning from: http://spoken-tutorial.org/cdcontent/
- 3. From this link download the FOSS categories in the language you wish to learn.
- 4. The Spoken Tutorial content will be downloaded as a zip file on your machine.
- 5. Extract the contents of the zip file & access them.

#### 2 The procedure to practise

- 1. You have been given a set of spoken tutorials and files.
- 2. You will typically do one tutorial at a time.
- 3. You may listen to a spoken tutorial and reproduce all the commands shown in the video.
- 4. If you find it difficult to do the above, you may consider listening to the whole tutorial once and then practise during the second hearing.

#### 3 Java

- 1. Click on "Select FOSS" or "All FOSS Categories" drop-down and choose "Java".
- 2. Click on "Select Language" or "All Languages" drop-down and choose the language (English, Hindi, Marathi ...) in which you wish to learn.
- 3. Click on "Submit" button.
- 4. You will see a list of tutorials based on your selection.
- 5. Start with the first tutorial in the displayed list.

## 4 First tutorial: Getting started with Java Installation

1. Locate the topic "Getting started with Java Installation" and click on it.

- 2. To view the tutorial, click on the Play icon which is located in the player.
- 3. The Pre-requisite will be visible below the player (only for Online contents).
- 4. Outline, Assignments, Code Files and Slides are available below the player.
- 5. Adjust the size of the browser in such a way that you are able to practice in parallel.
- 6. At 2:56 mins, pause the video.

#### 4.1 Open Terminal on Linux OS

- (a) The video says that you need to use the "Terminal" and "gedit text editor" in Linux OS.
- (b) The tutorials are explained on the Linux OS.
- (c) It will be easy for Linux users to follow as instructed in the tutorial.

### 4.2 Open Command Prompt on Windows OS

- (a) On Windows, one has to use "Command prompt" and "Notepad++ text editor" instead of "Terminal" and "gedit text editor".
- (b) To open the "Command Prompt" on Windows, press the "Windows" key and "R" key simultaneously on your keyboard. It will open the "Run" prompt.
- (c) At the prompt, type "cmd" and click on "Ok".
- (d) This will open the "Command" prompt.
- (e) Notepad++ can be opened from Start >> Applications >> Notepad++.
- 7. Play-pause-practise the whole tutorial.
- 8. Once the tutorial is complete, choose the next tutorial from the playlist which is located on the right side or below the player
- 9. Follow all the above instructions, till you complete the first 2 tutorials.
- 10. Third tutorial, Installing Eclipse will teach how to install Eclipse on Linux.
- 11. For Eclipse Windows Installation procedure, refer the Java Installation Sheet.

## 5 Fourth tutorial : Getting started Eclipse

- 1. From here onwards, the remaining tutorials are explained using the Eclipse IDE.
- 2. The commands shown, will work on both Linux OS and Windows OS.
- 3. Follow all the instructions given in the individual tutorials and reproduce all the commands as shown.

#### 5.1 Instructions to practise

- (a) Create a folder on the "Desktop" with your "Name-RollNo-Component". (Eg. "prathamesh-04-java").
- (b) Give a unique name to the files you save, so as to recognize it next time. (Eg. "Practice-1-java").
- (c) Remember to save all your work in your folder
- (d) This will ensure that your files don't get over-written by someone else.
- (e) Save your work from time to time, instead of saving it at the end of the task.

### 5.2 Common instructions for Assignments

- (a) Attempt the Assignments as instructed in the tutorial.
- (b) Save your work in your folder.

### 5.3 Common instructions to use Code files

- (a) Click on the link "Code files" located below the player and save it in your folder.
- (b) Extract the downloaded zip file.
- (c) You will see all the code/source files used in the particular tutorial.
- (d) Use these files as per the instructions given in the particular tutorial.
- 4. Play-pause-practise the whole tutorial.
- 5. Once the tutorial is complete, choose the next tutorial from the playlist which is located on the right side or below the player.
- 6. Follow all the above instructions, till you complete all the tutorials in the series.



#### Instruction Sheet for PHP & MySQL Spoken Tutorial Team IIT Bombay



#### 1 Online / Offline content

- 1. The online content of Spoken Tutorials can be accessed from :
  - http://spoken-tutorial.org/tutorial-search/
- 2. You can also download the Spoken Tutorials for offline learning from: http://spoken-tutorial.org/cdcontent/
- 3. From this link download the FOSS categories in the language you wish to learn.
- 4. The Spoken Tutorial content will be downloaded as a zip file on your machine.
- 5. Extract the contents of the zip file & access them.

#### 2 The procedure to practise

- 1. You have been given a set of spoken tutorials and files.
- 2. You will typically do one tutorial at a time.
- 3. You may listen to a spoken tutorial and reproduce all the steps shown in the video.
- 4. If you find it difficult to do the above, you may consider listening to the *whole* tutorial once and then practise during the second hearing.

#### 3 PHP and MySQL

- Click on "Select FOSS" or "All FOSS Categories" drop-down and choose "PHP and MySQL".
- 2. Click on "Select Language" or "All Languages" drop-down and choose the language (English, Hindi, Marathi ...) in which you wish to learn.
- 3. Click on "Submit" button.
- 4. You will see a list of tutorials based on your selection.
- 5. In this series, first 2 tutorials will teach you about "How to install PHP & MySQL on Windows & Linux".
- 6. If you have already installed PHP & MySQL, skip these tutorials.
- 7. Start with the third tutorial "Echo Function" in the displayed list.

## 4 First tutorial: XAMPP in Windows

- If you are a Windows User, locate the topic "XAMPP in Windows"
- 2. To view the tutorial, click on the Play icon which is located in the player.
- 3. This tutorial will teach how to install XAMPP on Windows OS.
- 4. Please note: There could be minor changes in the look and feel of newer versions of XAMPP. However, all the commands shown in the video will work in newer versions as well.

## 5 Second tutorial: XAMPP in Linux

- If you are a Linux User, locate the topic "XAMPP in Linux"
- 2. To view the tutorial, click on the Play icon which is located in the player.
- 3. This tutorial will teach how to install XAMPP on Linux OS.
- 4. Please note: There could be minor changes in the look and feel of newer versions of XAMPP. However, all the commands shown in the video will work in newer versions as well.

#### 6 Third tutorial: Echo Function

- 1. Locate the topic "Echo Function" and click on it.
- 2. To view the tutorial, click on the Play icon which is located in the player.
- 3. The Pre-requisite will be visible below the player (only for Online contents).
- 4. Outline, Assignments, Code Files and Slides are available below the player.
- 5. Adjust the size of the browser in such a way that you are able to practice in parallel.

### 6.1 Instructions to practise on Windows OS

- (a) The tutorials are explained on Windows
- (b) It will be easy for the Windows users to follow, as instructed in the tutorial.
- (c) Before you begin to practise, kindly create a folder "phpacademy" inside the folder c:\xampp\htdocs
- (d) Create the file helloworld.php in the folder c:\xampp\htdocs\phpacademy as it is required for this tutorial.
  - i. To do this, open the **ConTEXT** editor.
  - ii. Click on  $File \gg New \gg Save As$ .
  - iii. Name the file as helloworld.php.
  - iv. Remember to choose the location as
     c:\xampp\htdocs\phpacademy
  - v. Now click on **Save** button.
- (e) Please note that the path of phpacademy folder shown in the video is c:\xampp\htdocs\phpacademy
- (f) This will be your working directory for all the tutorials.
- (g) Henceforth, for all the videos, the .php and/or .html files should be created/copied in this directory.
- (h) You are free to create subdirectories here for each tutorial, so that you can manage all your files in a better way.

### 6.2 Instructions to practise on Linux OS

- (a) The tutorials are explained on WindowsOS.
- (b) To practise on Linux, follow these steps.
- (c) Before begin your practice, kindly create a folder "phpacademy" inside the folder /opt/lampp/htdocs/
- (d) Based on your installation, the web root path may vary as /opt/lampp/htdocs/ or /var/www/.
- (e) Create the file helloworld.php in the folder /opt/lampp/htdocs/phpacademy as it is required for this tutorial.
- (f) To do this, open the Terminal by pressing Ctrl-Alt-t keys simultaneously.
- (g) Now type cd /opt/lampp/htdocs/phpacademy in the Terminal and hit ENTER.

- (h) Now type gedit helloworld.php & and hit ENTER.
- (i) Please note that the path of phpacademy folder shown in the video is c:\xampp\htdocs\phpacademy
- (j) This is your working directory in Windows.
- (k) But for Linux OS, the equivalent path is: /opt/lampp/htdocs/ or /var/www/
- (l) This will be your working directory for all the tutorials.
- (m) Henceforth, for all the videos, the .php and/or .html files should be created/copied in this directory.
- (n) You are free to create subdirectories here for each tutorial, so that you can manage all your files in a better way.
- 6. Now resume the video and follow all the instructions.
- 7. Type all the code shown in the video in helloworld.php file and save it periodically, by clicking File >> Save.
- 8. At time 1:07 min, the video shows Firefox web browser to view helloworld.php file.
- 9. You can view this file in a separate tab or in a new web browser window.
- 10. Type http://localhost/phpacademy/ in the address bar of your Firefox browser.
- 11. Click helloworld.php.
- 12. This will open helloworld.php in the browser.
- 13. Every time you make some change to helloworld.php using gedit(Linux) or ConTEXT(Windows) editor, you should save your changes and refresh your web browser by pressing the F5 key, to reflect the changes.
- 14. In some of the future tutorials, Google Chrome is used as the web browser. But you can continue using Firefox or any other web browser.
- 15. From time 1:55 min, the video talks about parse error.
- 16. Please understand it carefully and try to reproduce the exact code as shown in the video.
- 17. Remember to save all your work in your folder.
- 18. This will ensure that your files don't get overwritten by someone else.

### 6.3 Common instructions for Assignments

- (a) Attempt the Assignments as instructed in the tutorial.
- (b) Save your work in your folder.

### 6.4 Common instructions to use Code files

- (a) Click on the link "Code files" located below the player and save it in your folder.
- (b) Extract the downloaded zip file.
- (c) You will see all the code/source files used in the particular tutorial.
- (d) Use these files as per the instructions given in the particular tutorial.
- 19. Play-pause-practise the whole tutorial.

- 20. Once the tutorial is complete, choose the next tutorial from the playlist which is located on the right side or below the player.
- 21. Follow all the above instructions, till you complete all the tutorials in the Basic Level.

#### 7 Twenty-fifth tutorial: MySQL Part 1

- 1. At 07:05 Primary key option is different in the latest version.
  - Click the drop down-box below the Index label and select "Primary". A new window opens to Add index.
  - Click on the Go button to set the primary key.
- At 07:08 Auto-increment can be set by clicking the check box A\_I
- 3. Follow all the above instructions, till you complete all the tutorials in the series.