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**Faculty of Technology and Engineering**

**U & P U. Patel Department of Computer Engineering**

Date: 01 / 12 / 2021

**Practical List**

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| Academic Year | : | 2021-22 | Semester | : | 4 |
| Course code | : | CE259 | Course name | : | Programming in Python |

**Note: Practical List is for Students. We need to cover concept require to implement respective practical**

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| **Sr. No.** | **Aim** |
|  | Installation & Configuration of Python(**3.6 or 3.7**) and Virtual Environment. Along with its all major editors, IDLE, Pycharm, Anaconda, Jupyter, Interpreter etc.  **Note: Do not install the latest version of python due to some backward compatibility issues.**  **Please take screenshots of each point mentioned in the assignment and upload .pdf file.** |
|  | 1. **Install Python 3.6.2:**   Step 1: Search for python 3.6.2    Step 2:    Step 3:    Step 4:    Step 5:    Step 6:  Test if installation was successful: |
|  | **Self-Exercise:**   * **Use virtualenv to create virtual environment**  1. Create virtual Environment using python -m command   Open Command Prompt and write the following commands-  **Step 1:**    A folder named Prac1 will be made in D drive which includes:    **Step 2:**    **Step 3:**    **Step 4:**  **Step 5:**    **Step 6:** |
|  | Virtual Wrapper:  Step 1:  Go into file directory where virtualenv is intalled      Step 2: activate    Step 3: Install virtualwrapper using the following command |
|  | 1. Create virtual environment in Ananconda, PyCharm IDE and VS Code IDE.   **Pycharm:**  **Step 1:**    **Step 2:**    **Step 3:**    **Step 4:**    **Step 5:**    Step 6:    **Step 7:**    **Step 8:**    **Step 9:**    **Step 10:**    **Step 11:**    **Step 12:**    **Step 13:** |
|  | **Anaconda:**  **Step 1:**    **Step 2:**    **Step 3:**    **Step 4:**    **Step 5:**    **Step 6:**    **Step 7:**    **Step 8:**    **Step 9:**    **Step 10:**      Now, open Anaconda Powershell  **Step 1: Check if conda is installed in the path.**    **Step 2:** Open anaconda Navigator and click on ‘create’    **Step 3:**    **Step 4:**    **Visual Studio:**        New terminal- |
|  | Virtual environment in Python  Step 1: Locate the folder where the python project is located and open a new terminal    Step 2: Copy path    Step 3: Write the following command  python -m venv <file path>\venv    Step 4: venv is created    Step 5: Now press ctrl+shift+p and click on ‘select interpreter’ for Python    Step 6: Then click on ‘Enter interpreter’ and Find    Step 7: Go to venv\Scripts and select python.exe    Step 8: Now open new Terminal to check if we’re in the environment or not |
|  | Switch between virtual environment using activate and deactivate option.  Step 1: Open a folder in cmd where we want to have a virtualenv    Step 2: Create virtual environment in this folder using ‘virtualenv <env name>’    Step 3: Go into Scripts folder        Step 4: Move out of the folder and into the Scripts file to activate the environment created    Step 5: Now numpy is installed in env1. Similarly create env2 where numpy is not installed    Step 6: Now try switching from env1 and env2 using activate and deactivate commands    Here in env1 numpy is already installed that is why it shows ‘requirement already fulfilled’  Whereas in env2 numpy is not installed so it installs numpy as specified. |