## Python Programming

### LABORATORY MANUAL

**B.Tech Semester -IV** 

**Subject Code: (KNC-402)** 



Session: 2020-21, Even Semester

Name:	KUSHAGRA JAISWAL
Roll. No.:	2000910139004
Group/Branch:	I.T-1

# JSS MAHAVIDYAPEETHA DEPARTMENT OF INFORMATION TECHNOLOGY JSS ACADEMY OF TECHNICAL EDUCATION

C-20/1, SECTOR-62, NOIDA

#### **OBJECT-:**

Write a python program Insertion sort.

### PROGRAM-:

```
insertion.py > ...
     def insertionSort(arr):
          for i in range(1, len(arr)):
             key = arr[i]
             j = i-1
             while j \ge 0 and key < arr[j]:
                      arr[j+1] = arr[j]
                      j -= 1
10
             arr[j+1] = key
11
12
13
14
     arr = [12, 11, 13, 5, 6]
15
     print(arr)
     insertionSort(arr)
16
     print ("Sorted array is:")
17
18
19
     print(arr)
20
```

#### **OUTPUT-:**

```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS D:\Python> python -u "d:\Python\insertion.py"
[12, 11, 13, 5, 6]
Sorted array is:
[5, 6, 11, 12, 13]
PS D:\Python> []
```