Assignment -2 & 3
Python Programming

1. Need to answers all questions. Do not copy from others. if anybody copied from others will be awarded zero marks.
2. Write all the questions in an order

Part – 1

1. Write a short note on conditional statements supported by Python with examples?
2. Explain the syntax of for loop? for loop is usually known as a definite loop just the statement with the help of example?
3. Explain the syntax of while loop? while loop is usually known as a indefinite loop just the statement with the help of example?
4. Explain the utility of break and continue statement with the help of example?
5. Difference between pass and continue statements?

Part – 2

Using conditional statements:
1. A company decides to give bonus to all its employees on Diwali. A 5% bonus on salary is given to the male workers and 10% bonus on salary is given to the female workers. Write a program to enter the salary of the employee and gender of the employee. If the salary of employee is less than 10000 then the employee gets an extra 2% bonus on salary. Calculate the bonus that has to be given to the employee and display the salary that the employee will get?
2. Write a program that determines whether a student is eligible for PG course or not. To be eligible the student must have obtained more than 80% in X^{th} and Inter examinations and 70% plus marks in PG examination. If the student changes his stream (Science, Commerce, Arts) then deduct 5% from his graduation score.
3. Write a program to read two numbers then find out whether the first number is multiple of second number?
4. Write a program to find max of given three numbers?
5. Write a program that determines whether an alphabet, digit or space was entered?
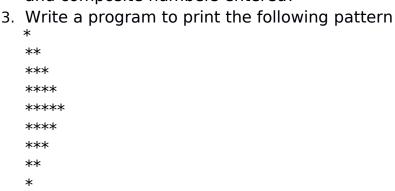
Using while loop:
1. Write a program to read the numbers until -1 is encountered also count the negative, positive, zero entered by the user?

2. Write a program that counts the number of lower case characters, upper case characters and digits entered by the user?
3. write a program that reads integer until the user wants to stop. When the user stop entering numbers, display the largest of all the numbers entered?
4. Write a program that prompts the user to enter numbers. Once the user enters -1 it display the counts, sum and average of the even numbers and odd numbers?
5. A video library rents new videos for 75 rupees a day and old movie for 50 rupees a day. Write a program to calculate the total charge for a customer's video rentals. The program should prompt the user for the number of each type of video and output the total cost.

Using for loop:
1. Write a program that prompts user to enter five words if the length of any word is less than six characters then it asks the user to enter it again. However if the word is of six or more characters then it display it on screen?
2. Write a program that prompts users to enter numbers. The process will repeat until user enters -1. Finally, the program prints the count of prime and composite numbers entered?
3. Write a program to print the following pattern
```
*
**
***
****
*****
****
***
**
*
```
4. Write a program to print the following pattern

```
*****
*   *
*   *
*   *
*****
```
5. Write a program using for loop to calculate the value of an investment input an initial value of investment and annual interest, and calculate the value of investment over time?