

## Assignment – 2

### Conditionals in Python

1. Write a python program to input a number check whether it is even or odd.
2. Write a python program to input a number and check whether it is a positive number, negative number or zero.
3. Write a python program to find largest of two numbers using ternary operator.
4. Write a python program to find largest of three numbers.
5. Write a python program to read a character and check whether it is a number, alphabet or special character. If the given character is an alphabet also check it is vowel or consonant.
6. Write a python program to take mark of 5 subject as input from the user and compute the average. Based on the average determine the Grade of the student from the following chart. Display the Grade.

Range	Grade
Average $\geq 90$	O
Average $\geq 80$ and Average $< 90$	E
Average $\geq 70$ and Average $< 80$	A
Average $\geq 60$ and Average $< 70$	B
Average $\geq 50$ and Average $< 60$	C
Average $< 50$	F

7. Write a python program to accept a number from the user. If the number is divisible by 3 print “Fizz”. If the number is divisible by 5 print “Buzz”. If the number is divisible by both 3 and 5 print “FizzBuzz”. If none of the condition satisfied just print the number.
8. Write a python program to accept three side of the triangle an input. Then first check if triangle can be formed or not. If triangle can be formed, determine the type of the triangle - Equilateral, Isosceles or Scalene
9. Write a python program to check a year is leap year or not.
10. Write a python program to determine the roots of a quadratic equation.
11. Write a program in C to calculate and print the Electricity bill of a given customer. The customer name and unit consumed by the user should be

taken from the keyboard and display the total amount to pay, to the customer. The charge are as follow :

Unit	Charge/unit
up to 199	Rs 1.20 /-
200 and above but less than 400	Rs 1.50 /-
400 and above but less than 600	Rs 1.80/-
600 and above	Rs 2.00/-

If bill exceeds Rs. 400 then an additional charge of 15% will be charged and the minimum bill should be of Rs. 100/-

12. Write a python program to take two number and operator as input from the user. Design a simple calculator with all the basic arithmetic operations using **match** statement.