Practice Questions:

A. Simple Programs

1. Write a program in python to add two numbers and print the result.
2. Write a program in python to find the area of a triangle.
3. Write a program in python to find square root of a number.
4. Write a program in python to solve a quadratic equation.
5. Write a program in python to convert Fahrenheit to Celsius.
6. Write a program in python to find quotient and reminder after division.
7. Write a program in python to swap two numbers using tuple assignment.
8. Write a program in python to find the average of three marks.
9. Write a program in python to calculate simple interest.
10. Write a program in python to calculate the net pay given basic pay, hra, da and deductions.

B. Programs using Conditional Statements

1. Given age determine whether a person is eligible to vote or not. (if else)
2. Check whether a number is odd or even. (if else)
3. Write a program to find largest of two numbers. (if else)
4. Obtain a character convert lower case to uppercase and vice versa. (if else)
5. Find the input year is leap year or not. (if else)
6. Read a number, check if it is positive, negative or zero. Increment the number if it is positive, decrement if it is negative. (elif statement)
7. Create a simple calculator. (elif statement)
8. Estimate the Grade based on the marks obtained by a student. (elif statement)
9. Find the largest of 3 numbers. (elif statement)
10. Obtain a character, check if it is lower case, uppercase or digit. (elif statement)

Write the output that you obtain for the following Python questions.

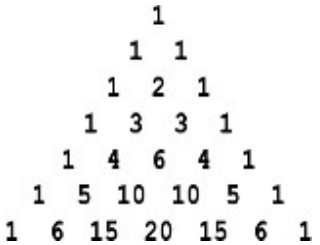
1. Write a program to check whether a number is odd or even.
2. Write a program in python to find the biggest of two numbers.
3. Write a program to convert a character from lower case to uppercase and vice versa.
4. Write a program in python to find whether a number is divisible by both 5 and 7 .
5. Write a program to find the input year is leap year or not.
6. Write a program in python to input three sides of a triangle and check whether the triangle is equilateral, isosceles or scalene
7. Write a program in python to input three sides of a triangle and check whether it is right angled one
8. Read a number, check if it is positive, negative or zero. Increment the number if it is positive, decrement if it is negative.
9. Create a simple calculator.
10. Estimate the Grade based on the marks obtained by a student.
11. Obtain a character, check if it is lower case, uppercase or digit.
12. Find the largest of 3 numbers.
13. Obtain a input from the user and display the corresponding data types (primitive and compound data type)

While Loop

1. Compute Exponentiation (power of a number) without using ** operator.
2. Write a program in python to print all the two digit numbers which are eitherdivisible by 3 or by 4.
3. Write a program in python to print the sum of all the digits of a number.
4. Perform the division operation and find the quotient and remainder values.(without using /, // % operators)
5. Check whether the given number is palindrome or not
6. Check whether the given number is Armstrong number or not
7. Compute the GCD of two numbers.(Euclidean Method and using commonfactors)
8. Take integer inputs from user until he/she presses q (Ask to press q to quitafter every integer input). Print average and product of all numbers.
9. Find the square root of a number. (Newton's method)

For Loop

1. Write a Python program to construct the following pattern, using a nested forloop.

a.	b.	c.
		

2. Write a Python program that accepts a word from the user and reverse it.
3. Write a Python program to count the number of even and odd numbers from aseries of numbers.
   Sample numbers : numbers = (1, 2, 3, 4, 5, 6, 7, 8, 9)
4. Write a Python program that prints each item and its corresponding type fromthe following list.

Sample List : datalist = [1452, 11.23, 1+2j, True, 'w3resource', (0, -1), [5, 12], {"class":'V', "section":'A'}]

5. Write a Python program that prints all the numbers from 0 to 6 except 3 and 6.Note : Use 'continue' statement.
6. Write a Python program which iterates the integers from 1 to 50. For multiplesof three print "Fizz" instead of the number and for the multiples of five print "Buzz". For numbers which are multiples of both three and five print "FizzBuzz".
7. Write a Python program to find numbers between 100 and 400 (both included)where each digit of a number is an even number. The numbers obtained should be printed in a comma-separated sequence.

8. Write a Python program to create the multiplication table (from 1 to 10) of anumber.
9. Find the sum of series:
   a. 1 + 1/2 + 1/3 + ….. + 1/N
   b. 1 + x^2/2 + x^3/3 + … x^n/n
10. Classify the given number is prime or composite number.