

## Assignment No : 4

Program 1: Write a Program to take all three sides of a triangle from the user and check whether the triangle satisfies the Pythagorean Theorem.

Input:

Side 1 = 3

Side 2 = 4

Hypotenuse = 5

Output: Triangle Satisfies the Pythagorean Theorem.

Program 2: Write a Program to calculate Simple Interest. Taking all essential terms to compute as input.

Program 3: Write a Program to check if a year is leap year or not.

{Note: If a year is divisible by 4 then it is leap year but if the year is century

year like 2000, 1900, 2100 then it must be divisible by 400}

Program 4: Write a Program to Print following Pattern

```
1 2 3 4
5 6 7 8
9 10 11 12
13 14 15 16
```

Program 5: Write a Program to take marks of five subjects Physics, Chemistry, Biology, Mathematics and Computer. Calculate percentage and grade according to following:

```
Percentage >= 90% : Grade A
Percentage >= 80% : Grade B
Percentage >= 70% : Grade C
Percentage >= 60% : Grade D
Percentage >= 40% : Grade E
Percentage < 40% : Grade F
```