Syllogistek
Systems Private Limited

Assignment – Day 7

1. Write functions to do following:

Take 3 sides of triangle as input and do following:

i. Return True for a valid triangle sides else false
ii. Classify the triangle as "Equilateral", "Rightangled", "Isosceles", "Scalene" (Default).
iii. Provided the given sides are valid else return NotValid
iv. Provided the triangle is "valid" and "Right angled" return the radius of circumcenter else return -1

Main program and Output format

```
def main():
    a,b,c = input("Enter sides of triangle separated by spaces").split()
    a,b,c = int(a),int(b),int(c)
    print(is_valid(a,b,c))
    print(triangle_class(a,b,c))
    print(circumRadius(a,b,c))
main()
Enter sides of triangle separated by spaces3 4 5
True
Rightangled
2.5
```

[Marks: 8]

2. Write a program to take integral numbers and calculate the factorial.

Note: If factorial is not defined return -1

Main program and output format

```
print(My_factorial(-1))
print(My_factorial(0))
print(My_factorial(1))
print(My_factorial(5))
```

```
-1
1
1
120
```

[Marks: 3]