**PYTHON ASSIGNMENT – 4**

**Program 1**

**Coding**

    marks = []

    sum=0

    num=0

    for i in range(1, 6):

        mark = int(input(f"Enter marks {i}: "))

        marks.append(mark)1

        sum=sum+mark

        num+=1

    average = sum / num

    print(f"Average Percentage: {average}")

    if average >= 90:

        grade = "A+"

    elif average >= 80:

        grade = "A"

    elif average >= 70:

        grade = "B"

    elif average >= 60:

        grade = "C"

    else:

        grade = "Fail"

    print("Grade: ",grade)

**Output**

Enter marks for subject 1: 100

Enter marks for subject 2: 100

Enter marks for subject 3: 90

Enter marks for subject 4: 90

Enter marks for subject 5: 50

Average Percentage: 86.0

Grade: A

**Program 2**

**Coding**

age=int(input("Enter your age :"))

if age<=12:

  print("child")

elif age>=13 and age<=19:

  print("Teenager")

elif age>=20 and age<=59:

  print("Adult")

else:

  print("Senior Citizen")

**Output**

Enter your age :50

Adult

**Program 3**

**Coding**

n=int(input("Enter a number :"))

fib1=0

fib2=1

print(fib1)

print(fib2)

for i in range(3,n+1):

  fib3=fib1+fib2

  print(fib3)

  fib1=fib2

  fib2=fib3

**Output**

Enter a number :12

0

1

1

2

3

5

8

13

21

34

55

89

**Program 4**

**Coding**

purchase=int(input("enter the purchase amount"))

if purchase<=500:

  discount=purchase\*0.05

  print("discount",discount)

  print("Total amt ",purchase-discount)

elif purchase>500 and purchase<1000:

  discount=purchase\*0.10

  print("discount",discount)

  print("Total amt ",purchase-discount)

else:

  discount=purchase\*0.15

  print("discount",discount)

  print("Total amt ",purchase-discount)

**Output**

enter the purchase amount1500

discount 225.0

Total amt 1275.0