

## Lab 4 Section A 19B-005-SE

```
In [1]: # Program 1
import math
a=float(input("Enter the value of a:"))
b=float(input("Enter the value of b:"))
c=float(input("Enter the value of c:"))
d = b**2 - 4*a*c
e = 2*a
x1 = (-b+ math.sqrt(d))/e
x2 = (-b- math.sqrt(d))/e
if e == 0:
    print("The equation cannot solve as there is a zero division")

else:
    print("x:",x1,"x:",x2)
```

Enter the value of a:2  
Enter the value of b:4  
Enter the value of c:1  
x: -0.2928932188134524 x: -1.7071067811865475

```
In [1]: # Program 2
a=3
d=6
n=35
print("T = a+(n-1)d")
T=a+(n-1)*d
print(T)
while input("Do you want to continue [y/n]:") == "y":
    n=int(input("Enter the Next term:"))
    T=a+(n-1)*d
    print("T=",T)
print("Thank you")
```

T = a+(n-1)d  
207  
Do you want to continue [y/n]:y  
Enter the Next term:45  
T= 267  
Do you want to continue [y/n]:y  
Enter the Next term:96  
T= 573  
Do you want to continue [y/n]:n  
Thank you

```

In [27]: #Program 4
name = str(input("\t\tEnter your name "))
father_name = str(input("\t\tEnter your Father's name "))

maths = float(input("\t\tEnter the marks of mathematics "))
Islamiat = float(input("\t\tEnter the marks of Islamiat "))
Fund_Programing = float(input("\t\tEnter the marks of Fund.Programing "))
Inf_Com_Technology = float(input("\t\tEnter the marks of Inf.Com.Technology "))
E_Electronics = float(input("\t\tEnter the marks of E.Electronics"))
obtain_marks = maths+Islamiat+Fund_Programing+Inf_Com_Technology+E_Electronics
Total_marks = 500
Percentage = (obtain_marks/Total_marks)*100

print("\n\n\t\t\t....1st Semester Mark Sheet...")
print("\n\t\t\tStudent Name      ",name)
print("\n\t\t\tFather Name      ",father_name)
print("\n\t\t\tRoll No.          ", "19B-005-SE")
print("\n\t\t\tMark obtain in Mathematics      ",maths)
print("\n\t\t\tMark obtain in Islamiat          ",Islamiat)
print("\n\t\t\tMark obtain in Fund_Programing      ",Fund_Programing)
print("\n\t\t\tMark obtain in Inf_Com_Technology      ",Inf_Com_Technology)
print("\n\t\t\tMark obtain in E_Electronics          ",E_Electronics)
print("\n\t\t\tMark your total Marks is          ",obtain_marks)
print("\n\t\t\tMark your percentage is          ",Percentage,"%")

if Percentage >= 80:
    print("\n\t\t\tYour grade is A+")
elif Percentage >=80:
    print("\n\t\t\tYour grade is A")
elif Percentage >=70:
    print("\n\t\t\tYour grade is B")
elif Percentage >=60:
    print("\n\t\t\tYour grade is C")
elif Percentage >=50:
    print("\n\t\t\tYour grade is D")
elif Percentage >=40:
    print("\n\t\t\tYour grade is F")

```

```

Enter your name FAAIZ
Enter your Father's name AZEEM
Enter the marks of mathematics 82
Enter the marks of Islamiat 85
Enter the marks of Fund.Programing 88
Enter the marks of Inf.Com.Technology 89
Enter the marks of E.Electronics82

```

....1st Semester Mark Sheet...

Student Name      FAAIZ

Father Name      AZEEM

Roll No.            19B-005-SE

Mark obtain in Mathematics      82.0

Mark obtain in slamiat	85.0
Mark obtain in Fund_Programing	88.0
Mark obtain in Inf_Com_Technology	89.0
Mark obtain in E_Electronics	82.0
Mark your total Marks is	426.0
Mark your percentage is	85.2 %
Your grade is A+	

```
In [22]: #Program 5
for i in range (1,6):
    for j in range(1,6):
        k=i*j
        print(k,end=" ")
    print("\n")
```

1 2 3 4 5

2 4 6 8 10

3 6 9 12 15

4 8 12 16 20

5 10 15 20 25