

```
In [ ]: # Green Paper
# Q1
x = 1
y = 2
print("I scored",x,"marks out of",y,"in the test.")
```

```
In [1]: #Q2
z = 2.45

if z > 0:
    z = (2*(z**2) + 1)**(1/3)
elif z <= 0:
    z = (2*(z**2) - 1)**(1/3)
print("The answer is",z)
```

The answer is 2.3516361022462644

```
In [13]: #Q3
a=float(input("Enter 'a':"))
b=float(input("Enter 'b':"))
c=float(input("Enter 'c':"))
r1 = (-b + ((b**2)-(4*a*c))**(0.5)) / (2*a)
r2 = (-b - ((b**2)-(4*a*c))**(0.5)) / (2*a)

if r1 >= 0 :
    sr1 = "positive"
elif r1<0:
    sr1 = "negative"

if r2 >= 0:
    sr2 = "positive"
elif r2<0:
    sr2 = "negative"

print("The roots are",r1,"(",sr1,")","and",r2,"(",sr2,")")
```

Enter 'a':-5

Enter 'b':10

Enter 'c':5

The roots are -0.4142135623730951 (negative) and 2.414213562373095 (positive)

```
In [1]: # Golden Paper
# Q2
y = 50
if y < 5:
    y = (2*(y**(1/3)) + 5)**(1/4)
elif y >= 5:
    y = (2*(y**(1/3)) - 5)**(1/4)
print("answer = ",y)
```

answer = 1.2405044111174302

```
In [2]: #Q1
a = 1
b = 2
print("Out of",b,"marks, I scored",a,"marks in the test.")
```

Out of 2 marks, I scored 1 marks in the test.

```
In [10]: #Q3
a=int(input("Enter 'a':"))
b=int(input("Enter 'b':"))
c=int(input("Enter 'c':"))
r1 = (-b + ((b**2)-(4*a*c))**(0.5)) / (2*a)
r2 = (-b - ((b**2)-(4*a*c))**(0.5)) / (2*a)

if b >= 0 :
    s1 = "+ "
else:
    s1 = "- "
    b = -b
if c >= 0:
    s2 = "+ "
else:
    s2 = "- "
    c = -c

print("The roots of",a,"x**2 ", s1 , b , "x " , s2 , c ,"are",r1,"and",r2)
```

Enter 'a':-5

Enter 'b':10

Enter 'c':-5

The roots of -5 x**2 + 10 x - 5 are 1.0 and 1.0

```
In [1]: # Blue Paper
#Q1
c = 5
d = 2
print(d,"out of",c,"eggs were rotten.")
```

2 out of 5 eggs were rotten.

```
In [1]: #Q2
f = 20

if f >= 10:
    f = ( ( f**(1/3)) / (f**(1/4)) ) + 5)**(1/3)
elif f < 10:
    f = ( (f**(1/3)) * ( 5 / (f**(1/4)) ) )**(1/3)
print(f,"is the answer")
```

1.8453076938873183 is the answer

```
In [11]: #Q3
x = float(input("Enter the 1st no.:"))
y = float(input("Enter the 2nd no.:"))
z = float(input("Enter the 3rd no.:"))

a = (x+y+z)/3

if y > 0:
    s2 = "+"
else:
    s2 = "-"
    y = -y
if z > 0:
    s3 = "+"
else:
    s3 = "-"
    z = -z

print("(" ,x,s2,y,s3,z,") / 3 =",a)
```

Enter the 1st no.: -1
Enter the 2nd no.: 6
Enter the 3rd no.: 1
(-1.0 + 6.0 + 1.0) / 3 = 2.0

```
In [3]: # White Paper
#Q1
u = 2
p = 5
print("Total no of eggs is",p,"and",u,"are rotten.")
```

Total no of eggs is 5 and 2 are rotten.

```
In [6]: #Q2
g = 5

if g <= 20:
    g = ( ( 1 / ( g**(1/4)) ) + ( 5 * g**(1/5)) )**(1/3)
elif g > 20:
    g = ( ( g**(1/3)) * ( 5 / ( g**(1/4)) ) ) ** (1/5)
print(g,"is the answer")
```

1.9632789599600335 is the answer

```
In [12]: #Q3
m = float(input("Enter the 1st no.:"))
n = float(input("Enter the 2nd no.:"))
o = float(input("Enter the 3rd no.:"))

s = m+n+o
p = m*n*o
a = (m+n+o) / 3

print("*****\n* param      * values          *\n*****
*****\n* sum          *",s,"\n* product *",p,"\n* average *",a,"
\n*****")
```

```
Enter the 1st no.:1
Enter the 2nd no.:1
Enter the 3rd no.:1
*****
* param      * values          *
*****
* sum          * 3.0
* product * 1.0
* average * 1.0
*****
```

```
In [1]: # White Paper NEW
#Q1
j = 3
k = 5
print("j=",j,"and k =",k,"\nj=",j,"and k =",k,"\nj=",j,"and k =",k,)
```

```
j= 1 and k = 2
j= 1 and k = 2
j= 1 and k = 2
```

```
In [ ]: #Q2
g = 5

if g <= 20:
    g = ( ( 1 / ( g**(1/4) ) ) + ( 5 * g**(1/5) ) )**(1/3)
elif g > 20:
    g = ( ( g**(1/3) ) * ( 5 / ( g**(1/4) ) ) ) ** (1/5)
print(g,"is the answer")
```

```
In [ ]: #Q3
a=int(input("""Enter 'a':"""))
b=int(input("""Enter 'b':"""))
c=int(input("""Enter 'c':"""))
r1 = (-b + ((b**2)-(4*a*c))**(0.5)) / (2*a)
r2 = (-b - ((b**2)-(4*a*c))**(0.5)) / (2*a)

if b >= 0 :
    s1 = "+ "
else:
    s1 = "- "
    b = -b
if c >= 0:
    s2 = "+ "
else:
    s2 = "- "
    c = -c

print("The roots of",a,"x**2 ", s1 , b , "x " , s2 , c ,"are",r1,"and",r2)
```