1.POWER OF A NUMBER

In [1]:
```
a=int(input("Enter the number:"))
b=int(input("Enter the power:"))
c=a**b
print(c)
```

```
Enter the number:5
Enter the power:3
125
```

2. SIMPLE INTEREST

In [4]:
```
p=int(input("Principal Amount:"))
r=int(input("Rate of interest:"))
t=int(input("year:"))
simple_interest=p*r*t/100
print("Interest:",simple_interest)
```

```
Principal Amount:100000
Rate of interest:12
year:5
Interest: 60000.0
```

3. NET SALARY OF AN EMPLOYEE

In [5]:
```
days=float(input("Enter the number of days present:"))
wages=float(input("Enter wages per day"))
basic=wages*days
HRA=basic*0.1
DA=basic*0.5
PF=basic*0.12
Net_salary=basic+HRA+DA-PF
print("Net salary=",Net_salary)
```

```
Enter the number of days present:29
Enter wages per day190
Net salary= 8154.8
```

4. SOLVE QUADRATIC EQUATION

In [7]:
```
print("Quadratic equation: ax^2+bx+c=0")
x=int(input("Enter the value of x:"))
a=int(input("Enter the value of a:"))
b=int(input("Enter the value of b:"))
c=int(input("Enter the value of c:"))
Solution=(a*(x**2)+b*x+c)
print("Solution of quadratic equation=",Solution)
```

```
Quadratic equation: ax^2+bx+c=0
Enter the value of x:5
Enter the value of a:2
Enter the value of b:9
Enter the value of c:12
Solution of quadratic equation= 107
```

5. AREA OF SHAPES

In [1]:
```
#Area of Rectangle
print("AREA OF RECTANGLE")
l=float(input("Enter the length:"))
b=float(input("Enter the breadth:"))
Area=l*b
print("Area=",Area)
```

```
AREA OF RECTANGLE
Enter the length:10
Enter the breadth:7
Area= 70.0
```

In [2]:
```
#Area of square
print("AREA OF SQUARE")
a=float(input("enter the length:"))
Area=a*a
print("Area=",Area)
```

```
AREA OF SQUARE
enter the length:8
Area= 64.0
```

In [3]:
```
#Area of Triangle
print("AREA OF TRIANGLE")
b=float(input("Enter the base:"))
h=float(input("Enter the height:"))
A=0.5*b*h
print("Area=",A)
```

```
AREA OF TRIANGLE
Enter the base:5
Enter the height:7
Area= 17.5
```

In [4]:
```
#Area of Parellelogram
print("AREA OF PARELLELOGRAM")
b=float(input("Enter the base:"))
h=float(input("Enter the height:"))
A=b*h
print("Area=",A)
```

```
AREA OF PARELLELOGRAM
Enter the base:8
Enter the height:5
Area= 40.0
```

6. VOLUME OF SHAPES

In [6]:
```
#Sphere
print("VOLUME OF SPHERE")
r=float(input("Enter the radius:"))
pi=3.1416
vol=((4/3)*pi*r**3)
print("volume=",vol)
```

```
VOLUME OF SPHERE
Enter the radius:5
volume= 523.5999999999999
```

In [7]:
```
#Cube
print("VOLUME OF CUBE")
a=float(input("Enter the length:"))
vol=a**3
print("volume=",vol)
```

```
VOLUME OF CUBE
Enter the length:3
volume= 27.0
```

In [8]:
```
#Cylinder
print("VOLUME OF CYLINDER")
r=float(input("Enter the radius:"))
h=float(input("Enter the height:"))
pi=3.1416
vol=pi*(r**2)*h
print("Volume=",vol)
```

```
VOLUME OF CYLINDER
Enter the radius:6
Enter the height:3
Volume= 339.2928
```

In [9]:
```
#Cone
print("VOLUME OF A CONE")
r=float(input("Enter the radius:"))
h=float(input("Enter the height:"))
pi=3.1416
vol=(pi*(r**2)*h)/3
print("Volume=",vol)
```

```
VOLUME OF A CONE
Enter the radius:3
Enter the height:5
Volume= 47.124
```

7. REVERSE OF A NUMBER

In [2]:
```
#Two digit number
num=int(input("Enter the two digit number:"))
n1=num%10
n2=num//10
reverse=(n1*10)+n2
print("reverse:",reverse)

#three digit number
num=int(input("Enter the three digit number:"))
n1=num%10
n2=num//10
n3=n2%10
n4=n2//10
reverse=(n1*100)+(n3*10)+n4
print("reverse:",reverse)
```

```
Enter the two digit number:52
reverse: 25
Enter the three digit number:324
reverse: 423
```

In [ ]:
```
```