

In [ ]: *# To accept an object mass in kg and velocity in m/s and display its momentum (e*

```
In [4]: m=float(input("Enter mass :"))
c= float(input("Enter velocity :"))
e=m*c
print("the momentum of the object is :",e)
```

the momentum of the object is : 30.0

In [ ]: *# Write a program for following conditions :*

- 1)If 'n' is single digit number then print square of it.
- 2)If 'n' is two digit then print square root of it.
- 3)If 'n' is three digit number the print cube of it.

```
In [14]: import math
n=int(input("Enter the 'n' :"))
if(n<10):
    print("Square of n :",n*n)
elif(10<=n<100):
    print("Square root of n :",math.sqrt(n))
elif(100<=n<1000):
    print("cube of n :",n*n*n)
else:
    print("Please enter n between 0 to 999")
```

Square of n : 25

```
In [15]: import math
n=int(input("Enter the 'n' :"))
if(n<10):
    print("Square of n :",n*n)
elif(10<=n<100):
    print("Square root of n :",math.sqrt(n))
elif(100<=n<1000):
    print("cube of n :",n*n*n)
else:
    print("Please enter n between 0 to 999")
```

Square root of n : 5.0990195135927845

```
In [16]: import math
n=int(input("Enter the 'n' :"))
if(n<10):
    print("Square of n :",n*n)
elif(10<=n<100):
    print("Square root of n :",math.sqrt(n))
elif(100<=n<1000):
    print("cube of n :",n*n*n)
else:
    print("Please enter n between 0 to 999")
```

cube of n : 91733851

```
In [17]: import math
n=int(input("Enter the 'n' :"))
if(n<10):
    print("Square of n :",n*n)
elif(10<=n<100):
    print("Square root of n :",math.sqrt(n))
```

```
elif(100<=n<1000):
    print("cube of n :",n*n*n)
else:
    print("Please enter n between 0 to 999")
```

Please enter n between 0 to 999

In [ ]: *# Read date of Birth and salary in rupees the perform data formation for DOB to*

```
In [18]: from datetime import datetime
def calculate_age(birthdate):
    today = datetime.now()
    birthdate = datetime.strptime(birthdate, "%Y-%m-%d")
    return today.year - birthdate.year - ((today.month, today.day) < (birthdate.month, birthdate.day))

def salary_in_dollars(salary_in_rupees, conversion_rate=82.5):
    return salary_in_rupees / conversion_rate

birthdate = input("Enter birthdate (YYYY-MM-DD): ")
salary = float(input("Enter salary in rupees: "))

age = calculate_age(birthdate)
salary_usd = salary_in_dollars(salary)

print(f"Age: {age} years")
print(f"Salary in USD: ${salary_usd:.2f}")
```

Age: 18 years

Salary in USD: \$1090.91

In [ ]: *# Print the reverse number of a given number*

```
In [21]: number = int(input("Enter a number: "))
reverse_number = int(str(number)[::-1])
print(f"Reversed number: {reverse_number}")
```

Reversed number: 54

In [ ]: *#Print multiplication table of number n*

```
In [22]: n = int(input("Enter a number: "))
for i in range(1, 11):
    print(f"{n} x {i} = {n*i}")
```

```
5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50
```