

1] To Accept an object mass in kilogram and velocity in m/s and display its momentum .

In [11]:

```
m=float(input("Enter mass "));
c=float(input("Enter velocity "));
momentum=m*c;
print("The momemtum of the object is",momentum);
```

The momemtum of the object is 2000.0

2] Write a program for folowing conditions

1]If 'n' is single digit number then print square of it.

2]If 'n' is two digit number then print squareroot of it.

3]If 'n' is three digit number then print cube of it.

In [41]:

```
import math;
n=int(input("Enter a number"));
if n<10:
    print("Square of n :",n*n);
elif 10<=n<100:
    print("Squareroot of n:",math.sqrt(n));
elif 100<=n<1000:
    print("Cube of n:",n*n*n);
else:
    print("Please enter number between 0 to 999")
```

Cube of n: 4019679

3] Read DOB and Salary in rupees than perform data information for DOB to age and salary in dollars.

In [50]:

```
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 < birthdate.month or
    (today.day < birthdate.day and today.month == birthdate.month)))

def salary_in_dollars(salary_in_rupees, conversion_rate):
    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: -1 years

Salary in USD: \$606.06

4] 4. Print the reverse number of a given number

In [57]:

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

Reversed number: 54

5] Print multiplication table of number n.

In [60]:

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

4566 x 1 = 4566
4566 x 2 = 9132
4566 x 3 = 13698
4566 x 4 = 18264
4566 x 5 = 22830
4566 x 6 = 27396
4566 x 7 = 31962
4566 x 8 = 36528
4566 x 9 = 41094
4566 x 10 = 45660

In []: