1)To accept an object mass in kg & velocity in m/s and display it's momentum.

momentum, e =m*c where m=mass,c=velocity

In [1]:
```
m=float(input("Enter mass:"))
c=float(input("Enter velocity:"))
e=m*c
print("The value of momentum is:",e)
```

```
The value of momentum is: 6.0
```

WAP for following conditions

1)if n is single digit number then print square of it

2)if n is two digit number then print square root of it

3)if n is three digit number then print cube of it

In [2]:
```
import math
n=int(input("Enter the value of n:"))
if (n<10):
    print("Square of n:",n*n)
elif (n>=10 and n<100):
    print("Square root of n:",math.sqrt(n))
elif (n>=100 and n<=999):
    print("Cube of n:",n**3)
else:
    print("Please enter n between 0 and 999")
```

```
Cube of n: 997002999
```

3)Read DOB and Salary in rupees then perform data formation for DOB to age & salary in dollars.

In [3]:
```
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.

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: $18181.82
```

4)Print the reverse number of a given number.

In [6]:
```
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 [7]:
```
n = int(input("Enter a number: "))
for i in range(1, 11):
    print(f"{n} x {i} = {n*i}")
```

```
10 x 1 = 10
10 x 2 = 20
10 x 3 = 30
10 x 4 = 40
10 x 5 = 50
10 x 6 = 60
10 x 7 = 70
10 x 8 = 80
10 x 9 = 90
10 x 10 = 100
```