# To accept an object Mass in Kg and Velocity in m/s and display it's Momentum. (e=mc,where m is mass and c is velocity)

In [2]:
```
 m=float(input("ENTER MASS: "))
c=float(input("ENTER VELOCITY: "))
e=m*c
print("The Momentum of object is: ",e)
```

```
The Momentum of object is:  50.0
```

# Write a python program for following conditions

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

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

In [13]:
```
import math
n=int(input("Enter the number: "))
if(n<10):
        print("Square of number: ",n*n)
elif(10<=n<100):
        print("Square root of number: ", math.sqrt(n))
elif(100<=n<1000):
        print("Cube of number: ",n*n*n)
else:
        print("Enter a number between 0 to 999")
```

```
Square of number:  25
```

# 2] If 'n' is a two digit number then print square root of it.

In [14]:
```
import math
n=int(input("Enter the number: "))
if(n<10):
        print("Square of number: ",n*n)
elif(10<=n<100):
        print("Square root of number: ", math.sqrt(n))
elif(100<=n<1000):
```

```
        print("Cube of number: ",n*n*n)
else:
        print("Enter a number between 0 to 999")
```

```
Square root of number:  9.0
```

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

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

```
Cube of number:  42875000
```

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

```
Enter a number between 0 to 999
```

# 4] Read the birth date and salary in rupees of employees. Perform data transformation for birthdate to age and also salary which is in rupees to salary in dollars using functions.

In [20]:
```
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.mon

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: 19 years
Salary in USD: $24242.42
```

# 5] 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: 987654321
```

# 6] 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}")
```

```
9 x 1 = 9
9 x 2 = 18
9 x 3 = 27
9 x 4 = 36
9 x 5 = 45
9 x 6 = 54
9 x 7 = 63
9 x 8 = 72
9 x 9 = 81
9 x 10 = 90
```

In [ ]:
```

```