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In [ ]: #To accept an object mass in kg and velocity in m/s and display its momentum
#moment, e = mc , where m=mass and c=velocity
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In [27]: m=float(input("Enter mass value"))
c=float(input("Enter velocity value"))
moment = m*c
print("The moment of object is : ",moment,"kgm/s")
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The moment of object is : 52.89 kgm/s

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In [ ]: #Write a python programming for following condition
# 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 then print cube of it
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In [36]: import math
n= int(input("Enter value of n"))
if n<10 : print("Square of n is : ",n*n)
elif 10<=n<100 : print("Square root of n is : ",math.sqrt(n))
elif 100<=n<1000 : print("Cube of n is : ",n**3)
else : print("Enter valid number between 0 to 999")
```

Square root of n is : 4.0

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In [ ]: # Read date of birth and salary in rupees then perform data formation for date o
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In [43]: 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}")
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Age: 18 years
Salary in USD: \$1212.12

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In [ ]: #Print the reverse number of a given number
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In [41]: number = int(input("Enter a number: "))
reverse_number = int(str(number)[::-1])
print(f"Reversed number: {reverse_number}")
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Reversed number: 321

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In [ ]: #Print multiplication table of number n.
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In [42]: n = int(input("Enter a number: "))  
         for i in range(1, 11):  
             print(f"{n} x {i} = {n*i}")
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12 x 1 = 12  
12 x 2 = 24  
12 x 3 = 36  
12 x 4 = 48  
12 x 5 = 60  
12 x 6 = 72  
12 x 7 = 84  
12 x 8 = 96  
12 x 9 = 108  
12 x 10 = 120
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In [ ]:
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