

```

# s = 5
# area = s**2
# print("Area of square is :", area)
# a = int(input("enter your value:"))
# b = str(a)
# if b.isdigit() :
#     print(a**2)
# else:
#     print("enter number")
# l = 6
# b = 4
# area = l*b
# print("Area of rectangle is:",area)
# l1 = int(input("enter length  :"))
# b1 = int(input("enter breadth  :"))
# l2 = str(l1)
# b2 = str(b1)
# if l2.isdigit() and b2.isdigit():
#     area = l1*b1
#     print("area of rectangle is ",area)
# else:
#     print("input is not integer")
#####
# 1 Question
#####

#3700 into 3*1000,1*500,2*100
# n = 3700
# n1000 = n//1000
# print("1000 are",n1000)
# amount = n%1000
# n500 = amount//500
# print("500 are",n500)
# amount = n%500
# n100 = amount//100
# print("n100 are :",n100)
#####
#if condition
#####
# n = 3700
# if n >=1000:
#     n1000 = n //1000
#     n1 = n%1000

```

```

#     print("1000 are",n1000)
# if n1 >=500:
#     n500 = n1//500
#     n2 = n%500
#     print("500 are",n500)
# if n2 >=100:
#     n100 = n2//100
#     print("100 are",n100)
# #####
# nested if
#####
# m = 2500
# if m >=1000:
#     n1000 = m//1000
#     print(n1000)
#     m1 = m%1000
#     if m1>=500:
#         n500 = m1//500
#         print(n500)
#         m2 = m1%500
#         if m2 >=100:
#             n100 = m2//100
#             print(n100)
# else:
#     print("enter amount >1000")
#####
#2 Question
#####
# n = 3672
# if n >=3600: #true
#     nhours = n //3600 #1
#     n1 = n%3600 #72
#     print("Hours are",nhours)
# if n1 >=60: #72>60 true
#     nmin = n1//60 #72//60 #1
#     n2 = n%60 #72%60 #12
#     print("mins are",nmin)
#     print("sec are",n2)
#####
#3 Question
# #####
# m = 85
# p = 90

```

```
# c = 88
# print("Total marks are :",m+p+c)
# print("Total marks are :", (m+p+c)/3)
"""
```

## Interview-Style Programming Questions: Basic Math and Logic

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### 1. Area of Square

Question: Calculate the area of a square. - Formula:  $\text{Area} = \text{side} \times \text{side}$   
- Input: - Side = 5 - Output: - Area of square is: 25

"""

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```
# s = 5
# area = s**2
# print("Area of square is :", area)
# a = int(input("enter your value:"))
# b = str(a)
# if b.isdigit() :
#     print(a**2)
# else:
#     print("enter number")
"""
```

### 2. Area of Rectangle

Question: Calculate the area of a rectangle. - Formula:  $\text{Area} = \text{length} \times \text{breadth}$   
- Input: - Length = 6 - Breadth = 4 - Output: - Area of rectangle is: 24

"""

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```
# l =6
# b = 4
# area = l*b
# print("Area of rectangle is:",area)
# l1 = int(input("enter length  :"))
# b1 = int(input("enter breadth  :"))
# l2 = str(l1)
# b2 = str(b1)
# if l2.isdigit() and b2.isdigit():
#     area = l1*b1
#     print("area of rectangle is ",area)
# else:
#     print("input is not integer")
"""
```

### 3. Area of Triangle

Question: Calculate the area of a triangle using base and height. -  
Formula:  $\text{Area} = (1/2) \times \text{base} \times \text{height}$  - Input: - Base = 8 - Height = 5  
- Output: - Area of triangle is: 20.0

```

"""
# b = 8
# h = 5
# area = (1/2)*b*h
# print("area of triangle is :", area)
"""4. Perimeter of Square
Question: Calculate the perimeter of a square. - Formula: Perimeter = 4
× side - Input: - Side = 6 - Output: - Perimeter of square is: 24

"""
# side = 6
# perimeter = 4*side
# print("perimeter of square is :",perimeter)
"""5. Perimeter of Rectangle
Question: Calculate the perimeter of a rectangle. - Formula: Perimeter
= 2 × (length + breadth) - Input: - Length = 5 - Breadth = 3 - Output:
- Perimeter of rectangle is: 16

"""
# l = 5
# b = 3
# perimeter = 2*(l+b)
# print("perimeter of rectangle is :",perimeter)
"""
6. Perimeter of Triangle
Question: Calculate the perimeter of a triangle. - Formula: Perimeter =
sidel + side2 + side3 - Input: - Side1 = 5, Side2 = 6, Side3 = 7 -
Output: - Perimeter of triangle is: 18

"""
# s1 = 5
# s2 = 6
# s3 = 7
# perimeter = s1+s2+s3
# print("Perimeter of triangle is:",perimeter)
"""
7. Break Amount into 1000s, 500s, and Remaining Change
Question: Break the total amount into denominations. - Input: - Amount
= 3700 - Output: - 1000s: 3 - 500s: 1 - Remaining: 200

"""
# m = 3700
# if m >=1000:
#     n1000 = m//1000
#     print("1000 are",n1000)

```

```

#     m1 = m%1000
#     if m1>=500:
#         n500 = m1//500
#         print("500 are",n500)
#         m2 = m1%500
#         if m2 >=100:
#             n100 = m2//100
#             print("100 are :",n100)
# else:
#     print("enter amount >1000")

```

"""

#### 8. Convert Seconds into Hours, Minutes, and Seconds

Question: Convert total seconds into hours, minutes, and seconds. -

Input: - Total seconds = 3672 - Output: - Hours: 1 - Minutes: 1 -

Seconds: 12

"""

```

# n = 3672
# if n >=3600: #true
#     nhours = n //3600 #1
#     n1 = n%3600 #72
#     print("Hours are",nhours)
# if n1 >=60: #72>60 true
#     nmin = n1//60 #72//60 #1
#     n2 = n%60 #72%60 #12
#     print("mins are",nmin)
#     print("sec are",n2)

```

"""

#### 9. Sum of Marks (Maths, Physics, Chemistry)

Question: Calculate the sum of marks in 3 subjects. - Input: - Maths =

85 - Physics = 90 - Chemistry = 88 - Output: - Total marks: 263

"""

```

# m = 85
# p = 90
# c = 88
# print("Total marks are :",m+p+c)

```

"""

#### 10. Average of Marks (Maths, Physics, Chemistry)

Question: Calculate the average of marks in 3 subjects. - Input: -

Maths = 85 - Physics = 90 - Chemistry = 88 - Output: - Average marks:

87.67

"""

```

# m = 85

```

```
# p = 90
# c = 88
# avg = (m+p+c)/3
# print("Total marks are :",avg)
```