

Program no. 2 :

Asking for the user's name ?

name = input ("What's your name ?")

Welcome message.

print ("-----")

print (f"Welcome abroad , {name} !")

print ("-----")

print (f"{name}, your journey into

python begins now .")

print ("May your code run without

errors and your ideas flow endlessly !")



- I) Write a python program that asks the user for his name and then welcomes him.

Output :-

>>> What's your name?) Pranay

Welcome aboard, Pranay!

Pranay, your journey into Python begins now.

May your code run without errors and your ideas flow endlessly!

II Write a python program that accepts principle, rate and time from the user and print the simple interest.

Greetings to user

```
name = input ("enter your name: ")
```

```
print ("Hello, ", name)
```

```
p = int (input ('enter principle amount :'))
```

```
r = int (input ("enter rate of interest :"))
```

```
t = int (input ("Enter duration of time  
in years: "))
```

```
Simple_interest = (p * r * t) / 100
```

```
print ("Your Simple Interest is : ",  
      simple_interest)
```

Output 2 :-

```
222 Enter your name is Pranoy
Hello , Pranoy
Enter Principle Amount : 12000000
Enter Rate of Interest : 3
Enter duration of time in years: 10
Your Simple Interest is : 3600000.0
```

III Write a python program that prompts the user to input Principle, Rate and time and calculate compound interest.

Greetings to user.

```
name = input("Enter your name: ")
```

```
print ("Hello," , name)
```

```
p = float (input ("Enter principle  
Amount : "))
```

```
r = float (input ("Enter Rate of Interest  
%"))
```

```
t = float (input ("Enter duration of  
Time in years : "))
```

formula for compound interest

$$\text{Compound_interest} = p * (1+r/100)^{t*12}$$

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Output 3: Displaying output on screen

```
>>> Enter your Name is Pranay , age is 21  
Hello , Pranay I am your calculator  
Enter Principle Amount : 1200000  
Enter Rate of Interest : 3  
Enter Duration of time in years: 10  
Your Compound Interest is : 412699.655
```

point ("Your Compound Interest is:"
, compound-interest)

Output 4 :

>>> what kind of figure's area and perimeter do you want to calculate?

Triangle

Enter height of the Triangle : 12

Enter length of the Base of Triangle : 7

Enter length of side 1 of Triangle : 4

Enter length of side 2 of Triangle : 5

Enter length of side 3 of Triangle : 3

Area of Triangle : 42.0

Perimeter of Triangle : 12.0

IV Write a program in python to calculate area and Perimeter of Various polygons such as Triangle, Rectangle, and Circle, etc.

```
# finding Area and Perimeter of a
# figure.
```

fig = input ("What kind of figure's area and perimeter do you want to calculate ?")

if fig == "Triangle":

height = float (input ("Enter Height of the Triangle :"))

base = float (input ("Enter length of the base of Triangle :"))

side1 = float (input ("Enter length of side 1 of Triangle:"))

side2 = float (input ("Enter length of side 2 of Triangle:"))

side3 = float (input ("Enter length of side 3 of triangle:"))

$\text{Area} = 0.5 * \text{base} * \text{height}$

$\text{Perimeter} = \text{side1} + \text{side2} + \text{side3}$

`print ("Area of Triangle : ", Area)`

`print ("Perimeter of Triangle : ", Perimeter)`

`elif fig == "Circle":`

$\text{Radius} = \text{float}(\text{input}("Enter the Radius of the Circle : "))$

$\text{Area} = 3.14 * \text{Radius} * \text{Radius}$

$\text{Perimeter} = 2 * 3.14 * \text{Radius}$

`print ("Area of Circle : ", Area)`

`print ("Perimeter (circumference) of Circle : ", Perimeter)`

`elif Fig == "Rectangle":`

$\text{length} = \text{float}(\text{input}("Enter the length of the Rectangle : "))$

$\text{width} = \text{float}(\text{input}("Enter width of the Rectangle : "))$

$\text{Area} = \text{length} * \text{width}$

$\text{Perimeter} = 2 * (\text{length} + \text{width})$

`print ("Area of rectangle : ", Area)`

`print ("Perimeter of Rectangle : ", Perimeter)`

`else :`

`print ("Sorry Sir, unfortunately this figure area/perimeter calculator is not available right now")`

Output :- 5 numbers said * 7250 = addition

>>> Enter three numbers separated by commas
600, 725, 450 entered Data

Largest number is : 725.0

Smallest number is : 450.0

IV Write a program in python to input 3 numbers separated by comma and find largest and smallest among them.

Input 3 numbers separated by Commas

```
num1, num2, num3 = map(float, input("Enter three numbers separated by commas : ").split(","))
```

find largest and Smallest.

```
largest = max(num1, num2, num3)
```

```
smallest = min(num1, num2, num3)
```

```
print("largest number is : ", largest)
```

```
print("smallest number is : ", smallest)
```