DATE OF PERORMING: 17/01/2022

Experiment 1: Performing Arithmetic Operations using Python & Solving multi-step problems using variables

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Aim: Run and execute the following word problem using Arithmetic Operators in Python

Objective: The objective is to learn the use of Python as a calculator and solve the word problem using various arithmatic functions like addition (+), subtraction (-), multiplication (×) and division (÷).

Problem Statement: 1] The population of a town is 198568. Out of them 45312 are men and 35678 are women. Find the number of children in the town.

2] A shopkeeper has 2425 boxes of 24 pencils each. How many pencils do all the boxes have in all?

3] There are 86 rooms in a school. 4356 students study there. Equal number of students sits in each room. Find the number of students sitting in one room?

4] Maria bought 96 toys priced equally for $12960. The amount of $1015 is still left with her. Find the cost of each toy and the amount she had.

5] A travel company wants to fly a plane to the Mauritus. Flying the plane costs 5000 dollars. So far, 29 people have signed up for the trip. If the company charges 200 dollars per ticket, what is the profit made by the company? Create variables for each numeric quantity and use appropriate arithmetic operations.

Output :

Problem 1:

Problem 2:

```
In [2]:  #problem2
         #A shopkeeper has 2425 boxes of 24 pencils each. How many pencils do all the boxes have in all?

         #storing the given values in variables
         no_of_pencils_per_box=24
         total_boxes=2425

         #formula for finding the number of pencils
         total_no_of_pencils= total_boxes*(no_of_pencils_per_box)

         #to display the output
         print("The total number of pencils in all of the boxes are: ",total_no_of_pencils)

The total number of pencils in all of the boxes are:  58200
```

PROBLEM 3:

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In [7]:  #problem3
         #There are 86 rooms in a school. 4356 students study there. Equal number of students sits in each room. Find the number of stud

         #storing the given values in variables
         total_no_of_students=4356
         total_rooms=86

         #formula for finding the number of students per room
         no_of_students_per_room= (total_no_of_students//total_rooms)

         #to display the output
         print("the number of students per room are: ", no_of_students_per_room)

the number of students per room are:  50
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PROBLEM 4:

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In [9]:  #problem4
         #Maria bought 96 toys priced equally for $12960. The amount of $1015 is still left with her. Find the cost of each toy and the

         #storing the given values in variables
         total_cost=12960
         total_toys_she_bought=96

         #formula for finding the cost price per toy
         cost_of_each_toy=total_cost//total_toys_she_bought

         #to display the output
         print("cost of each toy",cost_of_each_toy)

         #formula for finding the total amount she had
         total_amount_she_had= 1015+12960

         #to display the output
         print("The total amount she had: ",total_amount_she_had)

cost of each toy 135
The total amount she had:  13975
```

PROBLEM 5:

```
In [10]:   #problem5
           #]  A travel company wants to fly a plane to the Mauritus. Flying the plane costs 5000 dollars. So far, 29 people have signed u

           #storing the given values in variables
           total_cost_price=5000
           total_no_of_people=29
           cost_per_ticket=200

           #formula for finding selling price
           total_selling_price=(cost_per_ticket*total_no_of_people)

           #formula for finding the profit earned
           profit=total_selling_price-total_cost_price

           #to display the output
           print("the profit earned is: ",profit)

           the profit earned is:  800
```

Ans: 1] 117578 children.

2] 58200pencils.

3] 51 students.

4] $135, $13975

5] 800 $

Conclusion:

In the first practical of python we learned about different arithmetic operators, arithmetic calculations and also we learnt how to declare variables in python. We performed 5 simple programs to understand the basic syntax of code in python.