Group 5

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This is a program for basic calculator in python

Importing math function

```python
In [14]:  import math
```

Declaring variable with intial value of zero

```python
In [15]:  operation = 0
```

Making a while loop and another while loop inside it

```python
In [16]:  while operation != 7:    # condition for user input
              operation = int(input("Chose the operation to be implied.\
                                    \nEnter:1 for Addition\
                                    \nEnter:2 for Subtraction\
                                    \nEnter:3 for Multiplication\
                                    \nEnter:4 for Division\
                                    \nEnter:5 for Second power\
                                    \nEnter:6 for Square root\
                                    \nEnter:7 for Exit\n"))

              if operation == 5 or operation == 6 :       # if statement
                  num = int(input("Enter the Number: "))     # User input
              elif operation == 1 or operation == 2 or operation == 3 or operation == 4:
                  num1 = int(input("Enter the first number: "))      # User input
                  num2 = int(input("Enter the second number: "))     # User input
              elif operation == 7:   # If user chooses to exit
                  print("Goodbye")
              else:           # For invalid input
                  print("Invalid Input")

              while operation != 7:     # condition for running the operation chosen by the user
                  if operation == 1:    # For Addition
                      print("The sum of the two number is: ",num1 + num2)
                      break
                  elif operation == 2: # For Subtraction
                      print("The substraction of the two number is: ",num1 - num2)
                      break
                  elif operation == 3: # For Multiplication
                      print("The product of the two number is: ",num1 * num2)
                      break
                  elif operation == 4: # For Division
                      print("The division of the two number is: ",num1 / num2)
                      break
                  elif operation == 5: # For Second power
                      print("The second power of the number is: ",num ** 2)
                      break
                  elif operation == 6: # For Square root
                      print("The square root of the number is: ",math.sqrt(num))
                      break
```

```
Chose the operation to be implied.
Enter:1 for Addition
Enter:2 for Subtraction
Enter:3 for Multiplication
Enter:4 for Division
Enter:5 for Second power
Enter:6 for Square root
Enter:7 for Exit
1
Enter the first number: 12
Enter the second number: 3
The sum of the two number is:  15
Chose the operation to be implied.
Enter:1 for Addition
Enter:2 for Subtraction
Enter:3 for Multiplication
Enter:4 for Division
Enter:5 for Second power
Enter:6 for Square root
Enter:7 for Exit
2
Enter the first number: 12
Enter the second number: 4
The substraction of the two number is:  8
Chose the operation to be implied.
Enter:1 for Addition
Enter:2 for Subtraction
Enter:3 for Multiplication
Enter:4 for Division
Enter:5 for Second power
Enter:6 for Square root
Enter:7 for Exit
3
Enter the first number: 11
Enter the second number: 3
The product of the two number is:  33
Chose the operation to be implied.
Enter:1 for Addition
Enter:2 for Subtraction
Enter:3 for Multiplication
Enter:4 for Division
Enter:5 for Second power
Enter:6 for Square root
Enter:7 for Exit
4
Enter the first number: 10
Enter the second number: 5
The division of the two number is:  2.0
Chose the operation to be implied.
Enter:1 for Addition
Enter:2 for Subtraction
Enter:3 for Multiplication
Enter:4 for Division
Enter:5 for Second power
Enter:6 for Square root
Enter:7 for Exit
5
Enter the Number: 5
The second power of the number is:  25
Chose the operation to be implied.
Enter:1 for Addition
Enter:2 for Subtraction
Enter:3 for Multiplication
Enter:4 for Division
Enter:5 for Second power
Enter:6 for Square root
Enter:7 for Exit
6
Enter the Number: 16
The square root of the number is:  4.0
Chose the operation to be implied.
Enter:1 for Addition
Enter:2 for Subtraction
Enter:3 for Multiplication
Enter:4 for Division
Enter:5 for Second power
Enter:6 for Square root
Enter:7 for Exit
7
Goodbye
```

```python
In [ ]:
```