Lab 2 operator

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1. **Write a program to calculate the area of a rectangle using user input for length and width.**

```
#Take the length of the rectangle from user
Length = float(input("Enter the length of the rectangle : "))

#Take the breadth of the rectangle from user
Breadth = float(input("Enter the breadth of the rectangle : "))

Area = Length * Breadth #calculates and store the value in variable name Area

#prints the calculated area value with only 2 numbers after decimal
print(f"The area of rectangle is {Area:.2f}")
```

Output

```
Enter the length of the rectangle : 43.5
Enter the breadth of the rectangle : 23.9
The area of rectangle is 1039.65
```

2. **Create a program that converts temperatures from Fahrenheit to Celsius using the formula (F - 32) * 5/9.**

```
#Take the fahrenheit value from user
Fahrenheit = float(input("Enter the value of fahrenheit : "))

#Convert the value from fahrenheit to celcius using formula (F - 32) * 5/9
Celcius = (Fahrenheit - 32) * 5/9

#print the result value
print("The result when converted from fahrenheit to celsius is", Celcius )
```

Output

```
Enter the value of fahrenheit : 89.3
The result when converted from fahrenheit to celsius is 31.833333333333332
```

3. Create a program that checks if a number is both divisible by 2 and 3.

```
#Take input from user
num = int(input("Enter a number : "))

if(num%2 == 0 and num%3 == 0): #checks whether number is divisble by both 2 and 3
  print(f"{num} is divisible by both 2 and 3.") #print the statement
else:
  print(f"{num} is not divisible by both 2 and 3.") #print the statement
```

Output

```
Enter a number : 78
78 is divisible by both 2 and 3.
```

```
Enter a number : 45
45 is not divisible by both 2 and 3.
```

4. Write a program that performs a bitwise AND operation on two numbers.

```
# Take user input for two numbers
number1 = int(input("Enter the first number: "))
number2 = int(input("Enter the second number: "))

# Perform bitwise AND operation
result = (number1 & number2)

# Print the result
print(f"The bitwise AND of {number1} and {number2} is: {result}")
```

Output

```
Enter the first number: 5
Enter the second number: 4
The bitwise AND of 5 and 4 is: 4
```