

Experiment 10: Write a program to build a basic calculator using switch

CODE:

```
def add(x,y):
    return x+y
def subtract(x,y):
    return x-y
def multiply(x,y):
    return x*y
def divide(x,y):
    if y!=0:
        return x/y
    else:
        return "Cannot divide by zero"

while True:
    print("Options:")
    print("1: Add\n2: Subtract\n3: Multiply\n4: Divide\n5: Exit")
    choice = int(input("Enter Choice(1-5): "))
    if choice in [1,2,3,4]:
        num1 = float(input("Enter first number: "))
        num2 = float(input("Enter second number: "))

        if choice==1:
            print("Result: ",add(num1,num2))
        elif choice==2:
            print("Result: ",subtract(num1,num2))
        elif choice==3:
            print("Result: ",multiply(num1,num2))
        elif choice==4:
            print("Result: ",divide(num1,num2))
    elif choice==5:
        print("Exiting the calculator.Goodbye!")
        break
    else:
```

```
print("Invalid input. Please enter a number between 1 and 5.")
```

OUTPUT:

```
Options:
1: Add
2: Subtract
3: Multiply
4: Divide
5: Exit
Enter Choice(1-5): 1
Enter first number: 5
Enter second number: 6
Result: 11.0
Options:
1: Add
2: Subtract
3: Multiply
4: Divide
5: Exit
Enter Choice(1-5): 2
Enter first number: 5
Enter second number: 6
Result: -1.0
Options:
1: Add
2: Subtract
3: Multiply
4: Divide
5: Exit
Enter Choice(1-5): 3
Enter first number: 5
Enter second number: 6
Result: 30.0
```

```
Options:
1: Add
2: Subtract
3: Multiply
4: Divide
5: Exit
Enter Choice(1-5): 4
Enter first number: 5
Enter second number: 6
Result: 0.8333333333333334
Options:
1: Add
2: Subtract
3: Multiply
4: Divide
5: Exit
Enter Choice(1-5): 5
Exiting the calculator.Goodbye!
```