

DATE 3 Nov 23

EXP. No. 16

Activity 10

Write a Program to create a simple calculator using a switch case and function for every operation.

```
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")
    print("2. Subtract")
    print("3. Multiply")
    print("4. Divide")
    print("5. Exit")
    choice = 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 valid choice.")
```

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!