

Code With Mistake Comments

```

print("Simple Calculator")
a = int(input("Enter first number: "))
b = int(input("Enter second number: "))
print("1.Add 2.Sub 3.Mul 4.Div")
choice = int(input("Choose option: "))

if choice == 1:
    result = a + b # Error: No indentation
elif choice == 2 # Error: Missing colon :
    result = a - b # Error: No indentation
elif choice == 3:
    result = a * b # Error: No indentation
elif choice == 4:
    result = a / b # Error: No indentation
else:
    print("Invalid choice") # Error: No indentation
    print("Result:", result)
    if result > 0:
        print("Positive result") # Error: No indentation
    else:
        print("Negative result") # Error: No indentation

```

Mistakes Explanation

1. No indentation after if/elif/else statements.
2. Missing colon (:) after 'elif choice == 2'.
3. 'result' variable may be undefined if invalid choice selected.

Correct Code

```

print("Simple Calculator")

a = int(input("Enter first number: "))
b = int(input("Enter second number: "))

print("1.Add 2.Sub 3.Mul 4.Div")
choice = int(input("Choose option: "))

result = None

```

```
if choice == 1:  
    result = a + b  
elif choice == 2:  
    result = a - b  
elif choice == 3:  
    result = a * b  
elif choice == 4:  
    if b != 0:  
        result = a / b  
    else:  
        print("Cannot divide by zero")  
else:  
    print("Invalid choice")  
  
if result is not None:  
    print("Result:", result)  
    if result > 0:  
        print("Positive result")  
    elif result < 0:  
        print("Negative result")  
    else:  
        print("Zero result")
```