

# SDEV 300 - Project 1

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This post will serve as documentation for the project 1

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## MinMax Application

Test Case	Input	Expected Output	Actual Output	Pass?
1a	3, 5, 23, 27, 42	Min: 3, Max: 42	Min: 3, Max: 42	Yes
1b	-1, -2, -3, -4, -5	Min: -5, Max: -1	Min: -5, Max: -1	Yes
1c	a, b, c, d, e	error	error	Yes, error-catching out of assignment scope

### Test Case 1a

```
Welcome to the Python MinMax Application!
This application calculates the minimum and maximum of 5 integer values entered by a user.
Enter your first integer: 3
Enter your second integer: 5
Enter your third integer: 23
Enter your fourth integer: 27
Enter your fifth integer: 42

The minimum integer was 3
The maximum integer was 42
```

Output in Cloud9 IDE of test case 1a (normal numbers)

### Test Case 1b

```
Welcome to the Python MinMax Application!
This application calculates the minimum and maximum of 5 integer values entered by a user.
Enter your first integer: -1
Enter your second integer: -2
Enter your third integer: -3
Enter your fourth integer: -4
Enter your fifth integer: -5

The minimum integer was -5
The maximum integer was -1
```

Output in Cloud9 IDE of test case 1b (negative numbers)

### Test Case 1c

```
Welcome to the Python MinMax Application!
This application calculates the minimum and maximum of 5 integer values entered by a user.
Enter your first integer: a
Traceback (most recent call last):
  File "/home/ec2-user/environment/Project1/MinMax.py", line 9, in <module>
    input1 = int(input("Enter your first integer: "))
ValueError: invalid literal for int() with base 10: 'a'

Process exited with code: 0
```

Output in Cloud9 IDE of test case 1c (error with characters)

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## Calculator Application

Test Case	Input	Expected Output	Actual Output	Pass?
2a	1, 2, 3	2 + 3 = 5	2 + 3 + 5	Yes
2b	2, 3, 4	3 - 4 = -1	3 - 4 = -1	Yes
2c	3, 4, 0	warning message and exit	warning message and exit	Yes
2d	3, 10, 5	10 / 5 = 2	10 / 5 = 2	yes
2e	4, 5, 6	5 * 6 = 30	5 * 6 = 30	yes
2f	5, 10, 5	10 % 5 = 0	10 % 5 = 0	yes

### Test Case 2a

```
Welcome to the Python Calculator Application.
What calculation do you want to perform?
1) Addition (+)
2) Subtraction (-)
3) Division (/)
4) Multiplication (*)
5) Modulus (%)

Enter 1,2,3,4 or 5 indicating your selection: 1
You have selected addition.
Enter your first integer: 2
Enter your second integer: 3

The addition of 2 and 3 is 5

Process exited with code: 0
```

Output in Cloud9 IDE of test case 2a (addition)

### Test Case 2b

```
Welcome to the Python Calculator Application.
What calculation do you want to perform?
1) Addition (+)
2) Subtraction (-)
3) Division (/)
4) Multiplication (*)
5) Modulus (%)

Enter 1,2,3,4 or 5 indicating your selection: 2
You have selected subtraction.
Enter your first integer: 3
Enter your second integer: 4

The subtraction of 3 and 4 is -1

Process exited with code: 0
```

Output in Cloud9 IDE of test case 2b (subtraction)

### Test Case 2c

```
Welcome to the Python Calculator Application.
What calculation do you want to perform?
1) Addition (+)
2) Subtraction (-)
3) Division (/)
4) Multiplication (*)
5) Modulus (%)

Enter 1,2,3,4 or 5 indicating your selection: 3
You have selected division.
Enter your first integer: 4
Enter your second integer: 0
Cannot divide by zero.

Process exited with code: 0
```

Output in Cloud9 IDE of test case 2c (division by zero)

### Test Case 2d

```
Welcome to the Python Calculator Application.
What calculation do you want to perform?
1) Addition (+)
2) Subtraction (-)
3) Division (/)
4) Multiplication (*)
5) Modulus (%)

Enter 1,2,3,4 or 5 indicating your selection: 3
You have selected division.
Enter your first integer: 10
Enter your second integer: 5

The division of 10 and 5 is 2.0

Process exited with code: 0
```

Output in Cloud9 IDE of test case 2d (normal division)

## Test Case 2e

```
Welcome to the Python Calculator Application.
What calculation do you want to perform?
1) Addition (+)
2) Subtraction (-)
3) Division (/)
4) Multiplication (*)
5) Modulus (%)

Enter 1,2,3,4 or 5 indicating your selection: 4
You have selected multiplication
Enter your first integer: 5
Enter your second integer: 6

The multiplication of 5 and 6 is 30

Process exited with code: 0
```

Output in Cloud9 IDE of test case 2e (multiplication)

## Test Case 2f

```
Welcome to the Python Calculator Application.
What calculation do you want to perform?
1) Addition (+)
2) Subtraction (-)
3) Division (/)
4) Multiplication (*)
5) Modulus (%)

Enter 1,2,3,4 or 5 indicating your selection: 5
You have selected modulus
Enter your first integer: 10
Enter your second integer: 5

The modulus of 10 and 5 is 0

Process exited with code: 0
```

Output in Cloud9 IDE of test case 2f (modulus)