

Python Exercises

Exercise 1:

```
Please enter your name: Nigel
Hello, Nigel. Welcome to this program!
PS C:\Users\R O G S T R I X\Desktop\Files\DICS\Ter
y\Programming in Security (Python)\PSEC> █
```

Exercise 2:

```
Hello World, this is my first exercise in Python!
PS C:\Users\R O G S T R I X\Desktop\Files\DICS\Ter
y\Programming in Security (Python)\PSEC> █
```

Practical 1Q1:

```
Please enter the length of the square: 4
The Area of the square is: 16
The Perimeter of the square is: 16
PS C:\Users\R O G S T R I X\Desktop\Files\DICS\Te
y\Programming in Security (Python)\PSEC> █
```

Practical 1Q2:

```
Please enter your weight in kilograms: 76
Please enter your height in meters: 173
Your BMI is: 0.00254
PS C:\Users\R O G S T R I X\Desktop\Files\DICS\Ter
y\Programming in Security (Python)\PSEC> █
```

Practical 2Q1:

```
*****
ST2414 PSEC Practical 2 Qn 1
*****
Enter a number: 5
5 is odd
PS C:\Users\R O G S T R I X\Desktop\Files\DICS\Te
```

```
*****
ST2414 PSEC Practical 2 Qn 1
*****
Enter a number: 2
2 is even
PS C:\Users\R O G S T R I X\Desktop\Files\DICS\T
```

Practical 2Q2:

```
*****
ST2414 PSEC Practical 2 Qn 2
*****
Enter a number: 1
Enter another number: 2
2 is bigger!
PS C:\Users\R O G S T R I X\Desktop\Files\DICS\Ter
```

Practical 2Q3:

```
*****
ST2414 PSEC Practical 2 Qn 3
*****
Enter number of years in service: 10
Enter current salary: 1500
Your increment is $300
PS C:\Users\R O G S T R I X\Desktop\Files\DICS\Te
```

```
*****
ST2414 PSEC Practical 2 Qn 3
*****
Enter number of years in service: 5
Enter current salary: 1300
Your increment is $200
PS C:\Users\R O G S T R I X\Desktop\Files\DICS\Te
```

Practical 2Q4:

```
*****
ST2414 PSEC Practical 2 Qn 4
*****
Please enter a number or 'Q' to stop: 1
Current total is 1
Please enter a number or 'Q' to stop: 2
Current total is 3
Please enter a number or 'Q' to stop: 3
Current total is 6
Please enter a number or 'Q' to stop: q
The final sum is: 6
PS C:\Users\R O G S T R I X\Desktop\Files\DICS\Term
```

Practical 2Q5:

```
*****
ST2414 PSEC Practical 2 Qn 5
*****
Please enter a starting number: 1
Please enter an ending number: 9
2      4      6      8
PS C:\Users\R O G S T R I X\Desktop\Files\DICS\
```

Practical 2Q6Bigger (Using try-catch):

```
*****
ST2414 PSEC Practical 2 Qn 3
*****
Enter number of years in service: 10
Enter current salary: $1500
Your increment is 300
```

Practical 2Q6EvenOdd (Using try-catch):

```
*****
ST2414 PSEC Practical 2b Qn 1
*****
Enter a number: 9
9 is odd
```

```
*****
ST2414 PSEC Practical 2b Qn 1
*****
Enter a number: 6
6 is even
```

Practical 2Q6Increment (Using try-catch):

```
*****
ST2414 PSEC Practical 2 Qn 3
*****
Enter number of years in service: 10
Enter current salary: $1500
Your increment is 300
```

Practical 2Q7:

```
*****
ST2414 PSEC Practical 2 Qn 7
*****
1. Determine odd or even
2. Determine bigger number
3. Find sum of numbers
4. Display even numbers
*****
Enter a choice: 2
Enter a number: 3
Enter another number: 3
3 and 3 are the same!
*****
ST2414 PSEC Practical 2 Qn 7
*****
1. Determine odd or even
2. Determine bigger number
3. Find sum of numbers
4. Display even numbers
*****
Enter a choice: 
```

Practical 3Additional:

```
Please input food to search: Fried Rice
Yes, we serve the following:
1. Kimchi Fried Rice
Enter the dish 1-1 that you would like to order, or 0 to stop: 1
1 added
Enter the dish 1-1 that you would like to order, or 0 to stop: 1
1 added
Enter the dish 1-1 that you would like to order, or 0 to stop: 0
You have ordered ['Kimchi Fried Rice', 'Kimchi Fried Rice']
```

```
Please input food to search: Hot Dog
Sorry, we don't serve Hot Dog!
Pls choose from ['Beef Curry', ' Curry Prata', ' Kimchi Fried Rice', ' Katsu Curry']
```

```
Please input food to search: Beef Curry
Yes, we serve the following:
1. Beef Curry
Enter the dish 1-1 that you would like to order, or 0 to stop: 1
1 added
Enter the dish 1-1 that you would like to order, or 0 to stop: 1
1 added
Enter the dish 1-1 that you would like to order, or 0 to stop: 0
You have ordered ['Kimchi Fried Rice', 'Kimchi Fried Rice', 'Beef Curry', 'Beef Curry']

Please input food to search: []
```

Practical 3Q1String:

```
Please enter ports that were found to be open '|'
23
Please input port number for your 'service': 443
Sorry, port 443 is closed! Pls choose from ['23']
```

Practical 3Q2String:

```
Please enter your restaurant dishes, separated by comma ','
Fried Rice, Pasta, Salad, Lamb Chop
Please input food to search: Chicken Rice
Sorry, we don't serve Chicken Rice!
Pls choose from ['Fried Rice', ' Pasta', ' Salad', ' Lamb Chop']
```

Practical 3Q3Marks:

```
The 10 students scored [80, 39, 79, 81, 79, 70, 84, 57, 66, 86].
Scores that qualify for 'A' grade are:
80
81
84
86
a) Marks in ascending order: [39, 57, 66, 70, 79, 79, 80, 81, 84, 86]
b) Marks in descending order: [86, 84, 81, 80, 79, 79, 70, 66, 57, 39]
c) Highest Mark: 86
d) Lowest Mark: 39
e) Index(es) of students who failed: 1
```

Practical 3Q4MESS:

```
+++ Welcome to the Marks Entry Simple System (MESS) +++
Current marks for 10 students stored in system.
[88, 74, 69, 90, 42, 79, 66, 73, 100, 99]
1. Entry of marks to the MESS
2. Display the maximum mark in the MESS
3. Display the marks sorted in ascending order
4. Display a subset of marks in the MESS

Pls choose 1-4 or press ENTER to quit: 1
Pls enter marks for student 1 or -1 to end: 87
Pls enter marks for student 2 or -1 to end: 86
Pls enter marks for student 3 or -1 to end: 75
Pls enter marks for student 4 or -1 to end: 45
Pls enter marks for student 5 or -1 to end: 48
Pls enter marks for student 6 or -1 to end: 89
Pls enter marks for student 7 or -1 to end: 93
Pls enter marks for student 8 or -1 to end: 68
Pls enter marks for student 9 or -1 to end: 79
Pls enter marks for student 10 or -1 to end: 97
Pls enter marks for student 11 or -1 to end: 0
Pls enter marks for student 12 or -1 to end: -1
Invalid input! Pls enter a valid integer from 0-100.
```

```
+++ Welcome to the Marks Entry Simple System (MESS) +++
Current marks for 11 students stored in system.
[87, 86, 75, 45, 48, 89, 93, 68, 79, 97, 0]
1. Entry of marks to the MESS
2. Display the maximum mark in the MESS
3. Display the marks sorted in ascending order
4. Display a subset of marks in the MESS

Pls choose 1-4 or press ENTER to quit: 2
Highest Mark: 97

+++ Welcome to the Marks Entry Simple System (MESS) +++
Current marks for 11 students stored in system.
[87, 86, 75, 45, 48, 89, 93, 68, 79, 97, 0]
1. Entry of marks to the MESS
2. Display the maximum mark in the MESS
3. Display the marks sorted in ascending order
4. Display a subset of marks in the MESS

Pls choose 1-4 or press ENTER to quit: 3
Marks in ascending order: [0, 45, 48, 68, 75, 79, 86, 87, 89, 93, 97]

+++ Welcome to the Marks Entry Simple System (MESS) +++
Current marks for 11 students stored in system.
[87, 86, 75, 45, 48, 89, 93, 68, 79, 97, 0]
1. Entry of marks to the MESS
2. Display the maximum mark in the MESS
3. Display the marks sorted in ascending order
4. Display a subset of marks in the MESS

Pls choose 1-4 or press ENTER to quit: 4

The current set of marks stored in system is
[87, 86, 75, 45, 48, 89, 93, 68, 79, 97, 0]
Pls choose how you want to edit the list:
1. Splice the list
2. Remove a mark from the list
3. Change a mark
4. Add new marks
Pls choose how you want to edit the list: []
```