# Exercises

Question: Order the python code blocks

# Exercise 1

Check if all numbers in array are between 5 and 10

### **Example**

|  |  |
| --- | --- |
| INPUT | OUTPUT |
| [6, 5, 10, 8] | True |
| [2, 5, 7, 13, 4] | False |

2

# create boolean

allInRange = True

4

# Print output

print(allInRange)

3

# loop on array

for number in array:

    if  number < 5 or number >10: # find the condition !

        allInRange = False

1

# get input (1 array of integers)

array = eval(input())

# Exercise 2

|  |  |
| --- | --- |
| INPUT | OUTPUT |
| [2, 1, 4] | 2 2  1  4 4 4 4 |

1

def createRow(number) :

result = “ ”

for i in range(number) :

result += str(number)

return result

5

print(result)

2

for maxNumber in array :

newRow = createRow(number)

result += newRow

result += “\n”

3

result = [ ]

4

array = eval(input())

# Exercise 3

* As input, we have 3 arrays of numbers
* Display the array whose sum of its numbers is the greatest one
* If the 2 arrays sum are the same, just display an empty array

|  |  |
| --- | --- |
| INPUT | OUTPUT |
| [2, 3, 4]  [1, 0, 3]  [0, 1, 2] | [2, 3, 4]  *Because 2 + 3 + 4 = 9*  *1 + 0 + 3 = 4*  *0 + 1 + 2 = 3* |
| [2, -5, 7, 3, 4]  [1, 9, 3]  [ ] | [1, 9, 3]  *Because 2 + (-5) + 7 + 3 + 4 = 11*  *1 + 9 + 3 = 13*  *0 = 0* |
| [2, 4, 5, 5, 10]  [5, 3, 1, 2, -3, 1]  [4, 7, 2, 5, 8] | [ ]  *Because 2 + 4 + 5 + 5 + 10 = 26*  *5 + 3 + 1 + 2 + (-3) + 1 = 9*  *4 + 7 + 2 + 5 + 8 = 26* |

1

# Get the inputs (3 arrays of integers)

array1 = eval(input())

array2 = eval(input())

array3 = eval(input())

3

# Sum array1

for number in array1 :

    sum1 += number

10

# Print output

print(result)

6

if sum1 > sum2 and sum1 > sum3 : # if sum1 is the greatest

    result = array1

9

else : # if there is no greatest sum

    result = []

2

# Create variables to get sum of each array

sum1 = 0

sum2 = 0

sum3 = 0

5

# Sum array3

for number in array3 :

    sum3 += number

7

elif sum2 > sum1 and sum2 > sum3 : # if sum2 is the greatest

    result = array2

4

# Sum array2

for number in array2 :

    sum2 += number

8

elif sum3 > sum1 and sum3 > sum2 : # if sum3 is the greatest

    result = array3

Question: Comment the block

# Example

# Sum the numbers in array

result = 0

for number in array :

   result += number

# Exercise 2

# Add items into newArray when array[i] <0

for i in range(len(array)) :

if array[i] < 0 :

newArray.append(array[i])

# Exercise 3

# Count number of items in array which is item < 0

for i in range(len(array)):

if array[i] < 0:

count += 1

# Exercise 4

# Add newFruitDict with name and price into fruits

for i in range(5) :

fruitName = input()

fruitPrice = int(input())

newFruitDict = {“name”: fruitName, “price”: fruitPrice}

fruits.append(newFruitDict)

# Exercise 5

# Add fruit’s name into fruits dictionary if price of fruit lower than money.

for fruit in fruits :

if fruit[“price”] < money :

canBuy.append(fruit[“name”])

# Exercise 6

# Add items into newArray

newArray = []

for i in range(len(array)) :

    newArray.append(array[i-1])