* Enter a number (n1) on the console.
* Enter a number (n2) on the console.
* Compare the two number:
  + If n2 is greater than n1 print the sum of the two numbers.
  + Otherwise print *-1*.

1. What will be the **result** for these outputs?

|  |  |
| --- | --- |
| **Input** | **Output** |
| > 3  > 8 | 11 |
| > 5  > 5 | -1 |
| > 10  > 8 | -1 |
| > 0  > 5 | 5 |
| > 1  > 3 | 4 |

1. **Analyze the symbols** you need to solve this problem.

|  |  |  |
| --- | --- | --- |
| Element | Do you need it? | For what? |
| Action |  |  |
| Decision |  |  |
| Repeat |  |  |
| Input / Output |  |  |

1. From the following code, draw the corresponding flowchart.

n1 = int(input())

n2 = int(input())

sum = -1

if n2 > n1:

sum = n1 + n2

print(sum)

1. Solve this poll of question on hackerrank:

<https://www.hackerrank.com/work/tests/1404754/questions>

* Check if string contains only “A”.

1. What will be the **result** for these outputs?

|  |  |
| --- | --- |
| **Input** | **Output** |
| BBBB | False |
| AA | True |
| BBBBA | False |
| AABC | False |
| AAAAAAA | True |
| AAAD | False |

1. Fill up the gap of the following flowchart.



1. Implement it in Python.

text=input()

is\_A=True

for i in range(len(text)):

    if text[i]!="A":

        is\_A=False

print(is\_A)

1. Execute it and fill up the following result table.

|  |  |
| --- | --- |
| **Input** | **Output** |
| BBBAB | False |
| AAAAAA | True |
| ABABBBA | False |
| AABCA | False |

* Enter a number again and again until there is no “end” string.
* Print the even number in the console.

1. What will be the **result** for these outputs?

|  |  |
| --- | --- |
| **Input** | **Output** |
| > 5  > 3  > 2  > 10  > end | 2:10 |
| > 5  > 4  > 8  > 16  > end | 4:8:16 |
| > 2  > 6  > 4  > 7  > end | 2:6:4 |
| > 5  > 3  > 7  > 1  > end |  |
| > 1  > 2  > 3  > end | 2 |

1. Create a flowchart by using the condition (while) block.
2. Implement it in Python.

number=""

text=""

while text!="end":

    text=input()

    if text!="end" and (int(text))%2==0:

        number+=text+":"

print(number[:-1])

1. Is it possible to adapt your solution by using the repeat block? If so, do it.

* Input text in the console
* Print index of the LAST pattern “KK” (first K letter)
* If no “KK”, write -1

1. What will be the **result** for these outputs?

|  |  |
| --- | --- |
| **Input** | **Output** |
| DDKDDDKE | -1 |
| DDKKDDKKD | 6 |
| K | -1 |
| AAKAKK | 2 |
| XXKKXXKX | 2 |
| KKAAK | 0 |

1. What is wrong with this code?

text = input()

result = -1

for index in range(len(text)):

letter = text[index]

if letter == "K" and and text[index + 1] == "K":

result = index

print(result)

1. To find the bug, test this code and check if the output is correct.

|  |  |
| --- | --- |
| INPUT | OUTPUT |
| KK | 0 |
| KKK | 1 |
| AAKKAK | 2 |

1. Write the correct code.

Text=input()

Result=-1

For i in range(len(text)):

Letter=text[i]

If letter==”K” and Text[i-1]==”K”:

Result=i-1

Print(result)

* Enter 2 numbers using a string, as follows: “number1; number2”.
* Number1 and number2 shall be composed of 2 digits (example “45”)
* Between number1 and number2, the character “;” shall be entered.
* If format is good
  + Display the sum of these 2 numbers.
  + Otherwise display: “WRONG FORMAT”

1. What will be the **result** for these outputs?

|  |  |
| --- | --- |
| **Input** | **Output** |
| 12;13 | 25 |
| Ronan | WRONG FORMAT |
| 12;1 | WRONG FORMAT |
| 10;20 | Wrong format |
| 12/14 | 26 |
| 15;16;18 | Wrong format |

1. Do you need extra variables?
2. What is the information we need to keep?
3. Solve this problem and try your code with the previous inputs.

number = input("Put Your number...")

i = 0

sum = 0

sum1 = 0

number1 = ""

number2 = ""

isNumber = False

while i < len(number):

    if number[i] != ";" and not isNumber and number[i].isnumeric():

        number1 += number[i]

    elif number[i] == ";":

        isNumber = True

        sum1 += 1

    elif isNumber and number[i].isnumeric():

        number2 += number[i]

    i += 1

if sum1 > 0 and len(number1) == 2 and len(number2) == 2:

    sum = int(number1) + int(number2)

else:

    sum = "WRONG FORMAT"

print(sum)