Quiz 1

Algorithms

Part 1: Now that you learned how to add al numbers from 1 to 100, you are required to do the following tasks

1. Create an algorithm to add all odd numbers from 1 to 100
2. Create an algorithm to add even numbers from 1 to 100
3. Create an algorithm to add all numbers between 2 arbitrary numbers.

Part 2: Carl Friedrich Gauss was a German mathematician who invented a fast and efficient method for adding numbers between 1 and 100. You are required to read about his method and create an algorithm to add numbers between 1 and 100 using Gauss method.

Each task has 25 points:

For each task you will get

15 points for accuracy of your algorithm

5 points for using the smallest number of steps

5 points for error checking

**EXERCICE**

**Create an algorithm to add all odd numbers from 1 to 100**

INPUT

1. Declare index=1.
2. Declare sum=0.

PROCESS

1. Repeat next steps until index be greater than 100.
2. Add index plus 2.
3. Add suma plus index.

OUTPUT

1. Show suma in the console.

**EXERCICE**

**Create an algorithm to add even numbers from 1 to 100**

INPUT

1. Declare index=2.
2. Declare sum=0.

PROCESS

1. Repeat next steps until index be greater than 100.
2. Add index plus 2.
3. Add suma plus index.

OUTPUT

1. Show suma in the console.

**EXERCICE**

**Create an algorithm to add all numbers between 2 arbitrary numbers**

INPUT

1. Declare number1.
2. Declare number2.

PROCESS

1. Set index= number1
2. Repeat next steps until index be greater than number2.
3. Add index plus 1.
4. Add suma plus index.

OUTPUT

1. Show suma in the console.

**EXERCICE**

**You are required to read about his method and create an algorithm to add numbers between 1 and 100 using Gauss method.**

INPUT

1. Declare N.
2. Declare S.

PROCESS

1. Define N.
2. Process using Gauss Formula

OUTPUT

1. Show result in the console.