

Problem Definition

- 1) The ABC Manufacturing Company plans to give a year-end bonus to each of its employees. Compute the bonus of an employee. Consider the following criteria: if the employee’s monthly salary is less than 1,000, the bonus is 50% of the salary; for the employees with salaries greater than 1,000, the bonus is 1000. Print the name and the bonus of the employee.

Problem Analysis

Input: Name, Salary

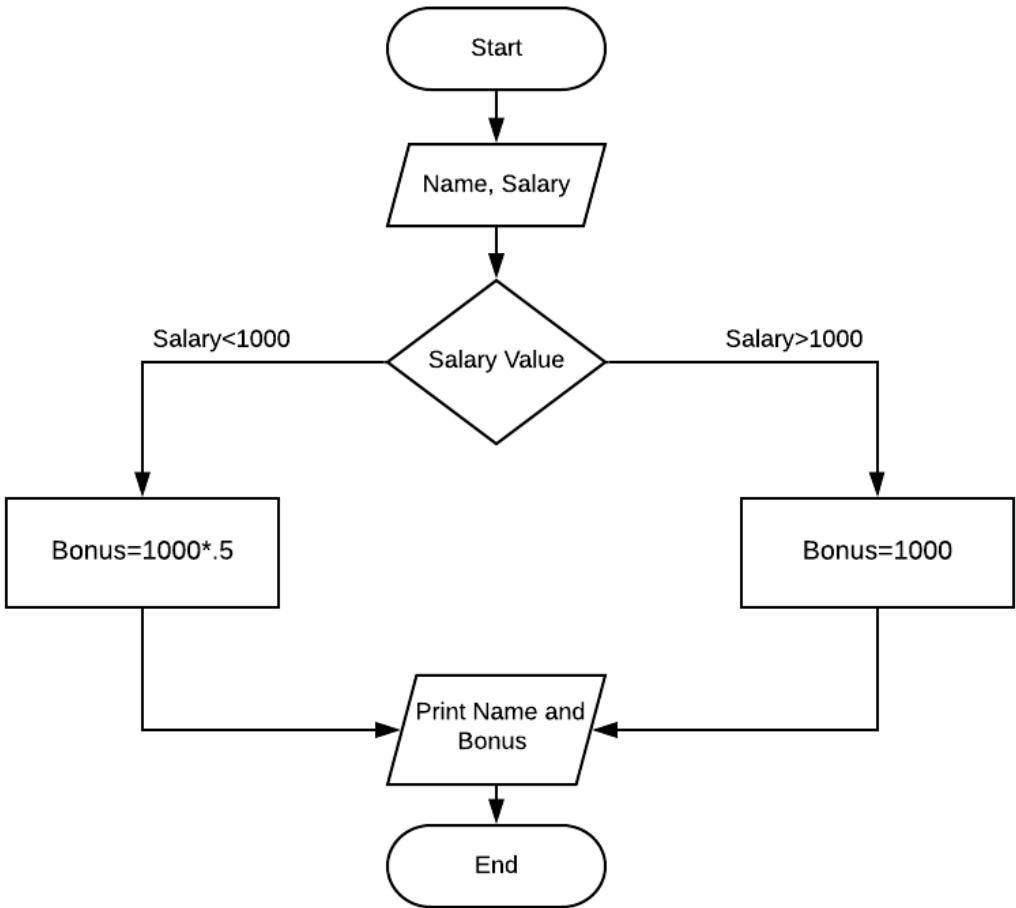
Process: Multiplication, Addition

Output: Print name and the bonus of the employee.

Algorithm

- 1) Accept the name of the employee and he’s salary as an input.
- 2) Compute the bonus of the employee with a salary less than Php1000 as $\text{Product} = \text{salary} * .5$
- 3) Compute the sum of the salary and the computed product of the bonus as $\text{Sum} = \text{product} + \text{salary}$.
- 4) Compute the sum of the employee with salary a greater than Php1000 as $\text{Sum} = \text{salary} + \text{bonus}$.
- 5) Print out the name and the bonus of the employee.

Flowchart



Problem Definition

- 2) Given two numbers x and y. Determine the Difference between x and y. If the difference is negative, compute the sum of x and y and store to R; if the difference is zero, compute the sum of twice x and twice y and store R; and if the difference is positive, compute the product of x and y and store R. Print out the values of x, y, and R.

Problem Analysis

Input: Two numbers x and y

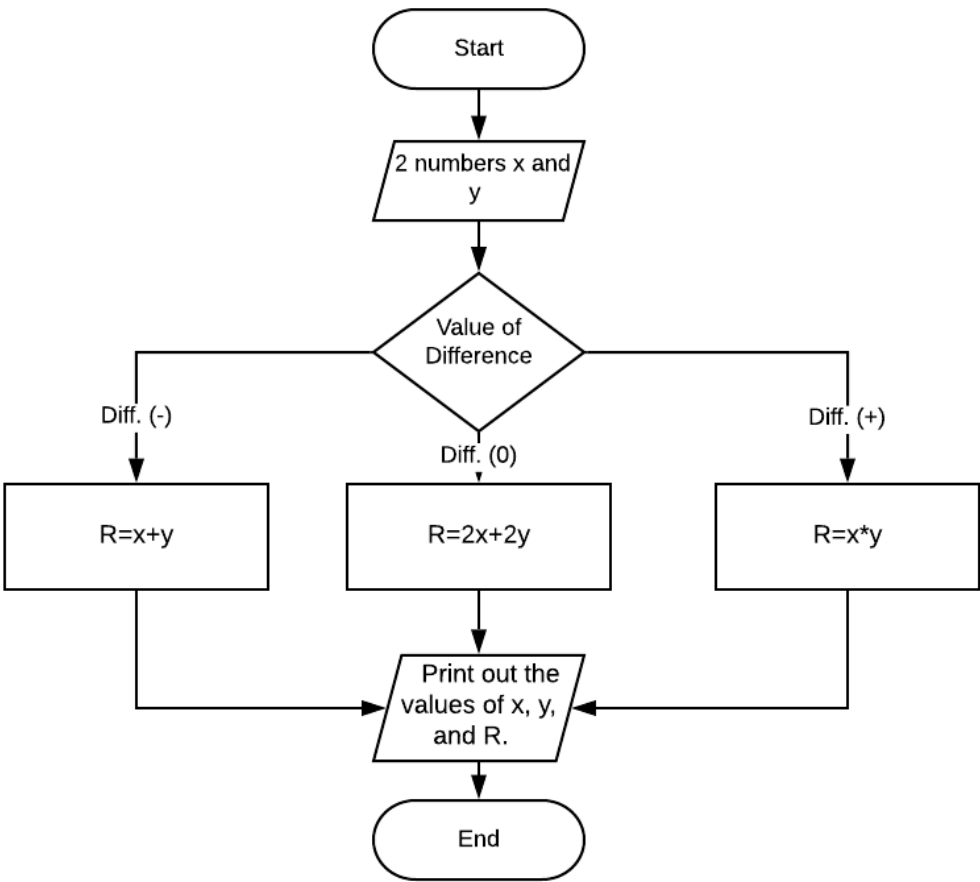
Process: Addition, Multiplication

Output: Print out the values of x, y and R.

Algorithm

- 1) Accept 2 numbers as input x and y.
- 2) If negative, compute the sum of x and y and store to R.
- 3) if zero, compute the sum of twice x and twice y and store R.
- 4) If positive, compute the product of x and y and store R.
- 5) Print out the values of x, y, and R.

Flowchart



Problem Definition

- 3) The initial value of the radius of a circle is equal to one unit and each succeeding radius is one unit greater than the value before it. Compute the area of the circle starting with $r=1$ up to $r=5$, then print each radius and corresponding area.

Problem Analysis

Input: Radius=1, I PI=3.1416

Process: Multiplication

Output: Print each radius and corresponding area

Algorithm

- 1) Accept the radius and PI as input.
- 2) Compute the area of the circle $r=1$ as $PI * R * R$
- 3) Print out the value of R and sqaure of R.
- 4) Increment the value of R by 1.
- 5) Test if R is less than or equal to 5.
- 6) If its less than R, it will repeat the steps 2 to 5.
- 7) If its equal or greater than 5 the process will stop.

Flowchart

