

Example 4:

Write an algorithm and draw its flow chart to read the value of X,Y and Z and then compute W according to the following:

$$W = X + Y - XY \text{ When } Z > Y$$

$$W = |X^2 - Y^2| \text{ When } Z = Y$$

$$W = XY \text{ When } Z < Y$$

Solution:

1-Start

2-Read the values of X,Y and Z

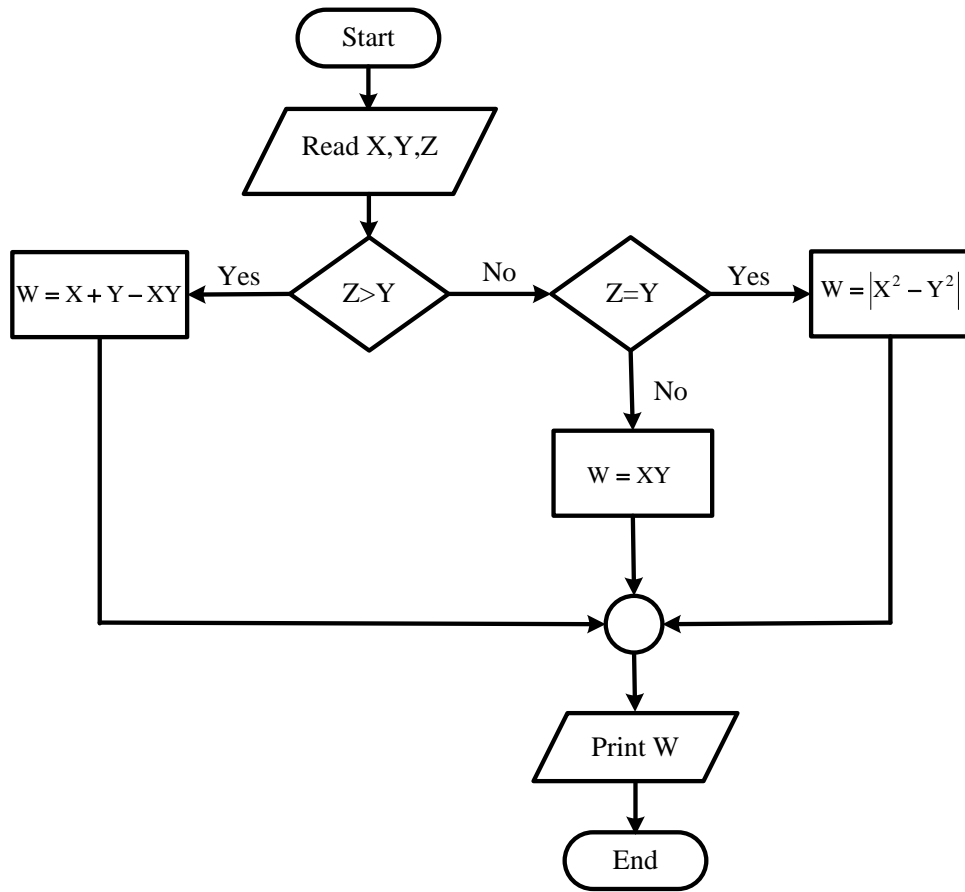
3- If $Z > Y$, compute W from $W = X + Y - XY$

4- If $Z = Y$, compute W from $W = |X^2 - Y^2|$

5-If $Z < Y$ compute W from $W = XY$

6-Print W

7-End



Example 5:

Write an algorithm and draw its flow chart to find the value of X1 and X2

$$X1 = \frac{-b + \sqrt{b^2 - 4ac}}{2a}, \quad X2 = \frac{-b - \sqrt{b^2 - 4ac}}{2a}$$

Solution:

- 1- Start
- 2- Read the values of a, b and c
- 3- If $a=0$ or $(b^2 - 4ac) < 0$, go to step 6
- 4- compute $X1 = \frac{-b + \sqrt{b^2 - 4ac}}{2a}$ and $X2 = \frac{-b - \sqrt{b^2 - 4ac}}{2a}$
- 5- print X1 and X2
- 6- End

