

Practical 2 (Selection)

1. Write a program that prompts the user to input a number. The program should then output the number and a message saying whether the number is positive, negative, or zero.
2. Write a program that prompts the user to input three numbers. The program should then output the numbers in ascending order.

Example output: 20, 19, 25

Output in ascending: 19, 20, 25

3. In a right triangle, the square of the length of one side is equal to the sum of the squares of the lengths of the other two sides. Write a program that prompts the user to enter the lengths of three sides of a triangle and then outputs a message indicating whether the triangle is a right triangle.

$$A^2 = B^2 + C^2$$

$$B^2 = C^2 + A^2$$

$$C^2 = A^2 + B^2$$

4. A box of cookies can hold 24 cookies, and a container can hold 75 boxes of cookies. Write a program that prompts the user to enter the total number of cookies. The program then outputs the number of boxes and the number of containers to ship the cookies. Note that each box must contain the specified number of cookies, and each container must contain the specified number of boxes. If the last box of cookies contains less than the number of specified cookies, you can discard it and output the number of leftover cookies. Similarly, if the last container contains less than the number of specified boxes, you can discard it and output the number of leftover boxes.

Example output:

Enter the number of cookies :5000

Number of Container: 2 (75 x24x2= 3600)

Number of leftover boxes: 58 (58x24=1392)

Number of leftover cookies: 8