Pascal Programming Questions

Q1: Write a Pascal program that prints the word “HELLO” on the screen, each time the user types a number. The program stops when the user enters the number 999 in the variable stop.

Q2: Write a program in Pascal language that allows user to enter a student’s name and mark obtained in a Maths examination. The program should prompt user to enter name and mark, check that mark is in the range 0 <= mark <= 100 otherwise asks for the mark again. The program outputs the student’s name and grade. Grades are awarded according to the following grade boundaries.
   80 < mark <= 100 grade A
   60 < mark <= 80 grade B
   40 < mark <= 60 grade C
   mark <= 40 failed

Make the program as user friendly as possible and include some inline comments to help program understanding

Q3: Write one or more statements in Pascal for each of the following tasks:
   (a) To calculate the volume using the formula
   (b) Declare an array named Height which would store 20 numbers.
   (c) Read 20 numbers from the keyboard and after finding their total, output their average.

Q4: Write a program in Pascal to input and store ten student names and their corresponding exam mark. The program should then output the following information:
   • A list of student names and marks
   • The average mark
   • The highest mark
   • The lowest mark.

Use in-line documentation (comments) where you think it is necessary to explain your source code.

Q5: Write a program in the Pascal language that allows the user to enter five numbers in the range 1 to 20. These five numbers are stored in a one dimensional array. The program will then scan the array and print on the screen the five numbers in ascending order (smallest first). Include in-line comments that describe what each section of your code is doing.

Q6: A program to check the health of a number of persons has to be written. Each person is asked to enter his/her body temperature (T) and one of the following messages is displayed:
   ‘You are in good health!’ if 37.5>T>36.5;
   ‘Your health is not Good!’ if 35.5>T>36.5; and
   ‘Your temperature is very high!’ if T>38.5.
   The program has to terminate when -1 is entered for the temperature. Draw a flowchart for this problem.