1. Write a program which displays the following output using embedded for loops:

5
44
333
2222
11111

2. The conversion rule between Fahreheit and Celsius units of temperature reads as T_C = (T_F-32) * 5/9, where T_C and T_F are the temperatures measured in Fahrenheit and Celsius units, respectively. Write a program which prints out a temperature conversion table: using a loop command the temperature in Fahrenheit should be incremented from -100 to +100 in steps of 1. The program should write out two columns, the first one contains the Fahrenheit and the second one the corresponding Celsius values.

3. Write a program which reads in one real number. Assume that this is the radius of a circle. Then read in an integer. If the integer is divisible by 3 calculate the area of the circle, however, if it is not divisible by 3 the perimeter should be calculated. Write out the results with a message.

4. Write a program which reads in 10 real numbers one by one using a for loop. The program checks whether the numbers are negative or non-negative and print it out. Count those non-negative numbers which fall between 10 and 20 (equality is also allowed). The program should write out the result of counting.

5. Write a program that prints out whether the water level of the river is low (0 m - 2 m), medium (2 m - 5 m) or high (higher than 5 m)! The water level of the river is measured in meters and is a real number between 0 and 5. The program should also check if the number OK or not, e.g. -2 cannot be OK. If the number is not correct the program should write a message on the screen. If the requested number is correct, print the category to the screen!