RECITATION 1

Q1. Write a program that asks the user to enter an integer number, stores this number in a variable of the type short (short int) and prints it back to the screen. What values can be entered? What is the biggest number you can enter and print correctly? Repeat the previous steps but this time use a variable of the type int or long.

Q2. Write a program that

- asks the user to enter 2 integer numbers in one line,
- obtains those 2 numbers using only one call of the function scanf,
- prints both numbers on the next line.

The screen dialogue should look like:

```
Enter 2 integer numbers: 17  7
The entered numbers are 17 and 7
```

Q3. Write a program that asks the user to enter 2 real numbers and prints their sum and product to the screen.

Q4. Write a program that asks the user to enter 2 integer numbers and prints the result and remainder of the integer division of both numbers and the real quotient. The screen dialogue should look like:

```
Enter 2 integer numbers: 17  7
integer quotient = 2
remainder = 3
quotient = 2.43
```

Q5. Write a program that asks the user to enter 2 real numbers, calculates the quotient and stores it into a variable of the type float. Print the quotient with 20 numbers after the decimal point.

Q6. Write a program that asks the user to enter hours, minutes and seconds separately and prints them in a sentence like:

The entered time is: hh hours mm minutes and ss seconds

where hh and mm can only be integer numbers. ss can have digits after the decimal point.

Q7. Write a program that asks the user to enter name and first name separately and prints them on 1 line. Test your program with names that contain white spaces (for example: Julia Rose Smith).

Q8. Write a program that asks the user to enter the radius of a circle, calculates the surface area of that circle and prints the result to the screen. (Pi number can be approximated as 3.141592653589793. Define pi as a constant in your program).

Q9. Write a program that asks the user to enter a number of seconds and prints the corresponding number of days, hours (<24), minutes (<60) and seconds (<60).

For example: 90061 sec = 1 day 1 hour 1 minute and 1 second

Q10. Write a program that asks the user to enter 5 integer numbers one by one. While reading the numbers, the program calculates the sum. At the end, the mean of all 5 numbers is printed with a precision of 2 digits after the digital point. Try to limit the number of variables in your program to 2 (or max 3) but do not introduce loops yet.