Programming Exercises

1. Create a program that takes two integers as input and prints their sum.

2. Create a program that takes 3 integers as input and prints their sum.

3. Create a program that takes 2 integers as input and prints their product.

4. Create a program that takes an integer and a string as input, let's call the integer **age** and the string **name**. Next your program should print the text: "Hello, my name is <**name**> and my age is <**age**>." where <**name**> and <**age**> are the values that were input.

5. Create a program that takes 2 strings as input, let´s call them **firstname** and **lastname**. They should hold (as the names of them imply) the first and last name of the user. Next you should create a variable called **fullname** which stores the concatenated value of the variables **firstname** and **lastname**. Finally, the program should print the text "Your full name is <**fullname**>" where <**fullname**> is the value of the variable **fullname**.

6. Create a program that accepts an integer as input, lets call it celsius. This value will represent a temperature on the celsius scale. Next you program should print the corresponding value on the Fahrenheit scale.The formula for converting celsius to Fahrenheit is as follows:
   (degrees in celsius) * 9/5 + 32

7. Create a program that accepts 2 integers as input and outputs the greater integer. If the integers are equal the program should print the text "the numbers are equal".

8. Create a program that takes 2 strings as input. If the strings are the same length the program should print "The strings are the same length". If they are not the same length the program shouldn't print anything.

9. Create a program that takes 3 integers as input and prints the integer with the lowest value.

10. Create a program that takes 1 integer as input. The program should print "Less than 10" if the input value is less than 10. If the input value is greater than or equal to 10 and less than 20 it should print "between 10 and 20". If the input value is greater than or equal to 20 the program should print "the value is too high!" and if the input value is less than 0 the program should print "too low".

11. Create a program that takes 2 integers as input, let's call them **a** and **b**. Next the user should be able to input another integer which we shall call **choice**. If **choice** is 1 then the program should add **a** and **b** together and print the result. If **choice** is 2 the program should subtract **b** from **a** and print the result. If **choice** is 3 the program should multiply **a** and **b** together and print the result. If **choice** is any other number the program should print the text: "invalid input."

These exercises should be implemented with a while loop and a for loop

12. Create a program that prints all the integers between 1 and 10 (1 and 10 included).

13. Create a program that prints all the integers between -5 and 10 (-5 and 10 included).

14. Create a program that prints all the integers between 3 and 13 (3 and 13 included) multiplied by two.

15. Create a program that lets the user input a single integer, lets call it **multiplier**. Next your program should print all the integers between 2 and 15 (2 and 15 included) multiplied by the value of **multiplier**.

16. Create a program that prints all the integers from 10 down to 0 (10 and 0 included).

17. Create a program that prints all the odd integers from 15 down to 3 (15 and 3 included).

18. Create a program that takes 2 integers as input, let's call them low and high. Your program should print all the integers between low and high (low and high included). You may assume that low is always lower than high.

19. Create a program that takes 2 integers as input, let's call them **low** and **high**. Your program should output all the integers between **low** and **high** but only if the value of **low** is lower than the value of **high**. (if printed the values of **low** and **high** should be included).

20. Create a program that takes an integer as input, let´s call it **turns**. This integer should indicate how many times the user wants to input a new integer. Next the program should let the user input **turns** many integers. For each input value the program should print "you picked <value>" where value is the integer the user input.
    So if the user inputs 3 to begin with that means that the variable **turns** should get the value 3 and the user should be able to input 3 more integers.

21. Create the same program as in assignment 20 with one change. Now the text "you picked <value>" where value is the number that was input should only be printed if that value is an odd number.

22. Create a program that takes 2 integers as input, let's call them **low** and **high**. Your program should print the sum of all the integers between **low** and **high**(low and high included). You may assume that **low** is always lower than **high**.

23. Create a program that takes 2 integers as input, let's call them **low** and **high**. Your program should print the sum of all the odd numbers between **low** and **high**(low and high included). You may assume that **low** is always lower than **high**.

24. Create a program that takes 2 integers as input, let's call them **low** and **high**. Your program should print the sum of all the integers between **low** and **high**(low and high included) that are divisible by 3. You may assume that **low** is always lower than **high**.

25. Create a program that takes 2 integers as input, let's call them **low** and **high**. Your program should print the sum of all the integers between **low** and **high**(low and high included) that are divisible by 3 or 5. You may assume that **low** is always lower than **high**.

26. Create a program that takes an integer as input, let´s call it **turns**. This integer should indicate how many times the user wants to input a new integer. Next the program should let the user input **turns** many integers. The program should then print how many negative integers the user input.

27. Create a program that takes an integer as input, let´s call it **turns**. This integer should indicate how many times the user wants to input a new integer. Next the program should let the user input **turns** many integers. The program should then print the sum of all the negative integers the user input.

28. Create a program that takes an integer as input, let´s call it **turns**. This integer should indicate how many times the user wants to input a new integer. Next the program should let the user input **turns** many integers. The program should then print how many negative integers the user input and how many positive integers the user input.

29. Create a program that takes an integer as input, let´s call it **turns**. This integer should indicate how many times the user wants to input a new integer. Next the program should let the user input **turns** many integers. The program should then print how many negative integers the user input, how many positive integers the user input, the sum of all the positive integers and the sum of all the negative integers the user input.