Questions to practice functions

For each function that you define, you need to practice calling the function using one or two statements in void setup().

1. Write a function named **halfOf** that takes an integer as input and returns half of that number. For example, if the input is 4, it will return 2. If the input is 7, it will return 3.5
2. Write a function called **double** that takes an integer as input and returns double of the number. For example, if the input is 13 it will return 26.
3. Write a function named **bigger** that takes 2 integers as input and returns the bigger of the two numbers. For example, if the input is 4, -3 it will return 4.
4. Write a function named **smaller** that takes 2 integers as input and returns the smaller of the two numbers. For example, if the input is 4, -3 it will return -3.
5. Write a function named **isEqual** that takes 2 integers as input and returns true if the two numbers are equal and false otherwise. For example, if the input is 4, -3 it will return false. If the input is 67,67 it will return true.
6. Write a function named **isEven** that takes an integer as input and returns true if it an even number.
7. Write a function named **sumAllNumbersBetween** that takes 2 integers as input and returns the sum of all the numbers between the two input values. For example, if the input is 2,6 the function will return 2+3+4+5+6 i.e. 20.
8. Write a function named **countDigits** that takes an integer as input and returns the number of digits in the input. For example, if the input is 34231 it should return 5.
9. Write a function named **addAllDigits** that takes an integer as input and returns the sum of all digits in the input. For example, if the input is 34231 it should return 3+4+2+3+1 i.e. 13.
10. Write a function named **factorial** that takes an integer as input and returns the factorial of the input. For example, if the input is 5, it should return 5*4*3*2*1 = 120.