Problem 1:

Create a function that takes two number as input and return true if one of them is 15 or their summation is 15

Example: 1. Input: 5 15 --> Output: true

2. Input: 10 5 --> Output: true

3. Input: 5 5 --> Output: false

Problem 2:

Function to check if the given number is a perfect square or not.

(Search for what is perfect square is.)

Problem 3:

You have five variables x1, x2, x3, x4, x5 their values are initially (1, 2, 3, 4, 5). One of these variables is replaced with 0. You need to make a function that takes these five variables and checks which of them is replaced.

Example: Input: 1, 2, 0, 4, 5 --> Output: 3

Input: 0, 2, 3, 4, 5 --> Output: 1

Problem 4:

Given a letter. If the letter is lowercase print this letter after converting it to uppercase. And if the letter is uppercase print this letter after converting it to lowercase.

Example: Input: a --> A

Input: A --> a

Problem 5:

Create function that takes two numbers as input to calculate the sum of odd numbers greater than the first numbers and less than the second number.

Example: 1. Input: 10 30 --> Output: 200

2. Input: 0 10 --> Output: 25

Problem 6:

Function that takes a number n and then takes n numbers from the user (using prompt) and if the numbers that the user will enter contains 4 or 7 then log to the console “It’s your lucky day” otherwise log “It’s not your lucky day”.

Example:

1. Input: 5 --> The number that will be passed to the function

   1 2 3 4 5

   Output: “It’s your lucky day”

2. Input: 3

1 3 6

Output: “It’s not your lucky day”

Problem 7:

Function that takes number N and then print all the divisors of this number. (You can search for what is the divisors is).

Example: 1. Input: 6 --> Output: 1 2 3 6

2. Input: 12 --> Output: 1 2 3 4 6 12

Problem 8:

Given number N you have to print all prime number between 1 and n

(Prime numbers are the number that are inly divisible by 1 and it self)

Example: 1. Input: 5 --> Output: 2 3 5

2. Input: 10 --> Output: 2 3 5 7

Problem 9:

Function that takes a number n and then takes n numbers from the user (using prompt) and count the sum of these numbers, how many odd numbers, how many even numbers.

Problem 10:

Function takes number n, log to console n lines that describe PUM game.

Example: Input: 3

Output:

1 2 3 PUM

5 6 7 PUM

9 10 11 PUM

Problem 11:

Create function that takes two numbers that have to determine if the product of these two numbers will be positive or negative or zero.

Example: 1. Input: -1 3 --> Output: negative

2. Input: 2 5 --> Output: positive

Problem 12:

Create a function finalGrade(), which calculates the final grade of a

student depending on two parameters: a grade for the exam and the number of completed projects.

This function should take two arguments: grade for exam (from 0 to 100), number of completed projects (from 0 and above).

This function should return a number (final grade). There are four types of final grades:

- 100, if a grade for the exam is more than 90 or if the number of completed projects more than 10.
- 90, if a grade for the exam is more than 75 and if the number of completed projects is minimum 5.
- 75, if a grade for the exam is more than 50 and if the number of completed projects is minimum 2.
- 0, in other cases

Example: 1. Input: 100 12 --> Output: 100

2. Input: 85 5 --> Output: 90