

Final exercises

1. Make a Script that first prompts the user for a number and then present a menu allowing him to choose among geometrical figures: diamond, square or triangle. It must print, by using asterisks, the geometrical figure of his choice made of the number of files he entered.
2. Make a script that makes the same, but the geometrical figure must be empty. Only the borders are made of asterisks
3. Make a script that prompts the user with a number to calculate the factorial. Do it in the traditional and recursive way.
4. Make a script that calculates the odds of winning a lottery according to the following formula:

$$\frac{n!}{r!(n-r)!}$$

**n - TOTAL NUMBER OF POSSIBLE NUMBERS
 r - NUMBER OF NUMBERS CHOSEN
! - FACTORIAL**

5. Create a script that prompts the user with a number and calculates the sum from 1 to this number. Do it recursively.
6. Create a script that prompts the user with a number and calculates the number of digits. Do it recursively.
7. Create a script that prompts the user with a number and prints it in reverse order.