# Intro to JS

## TASK

**Task 1**. You need to calculate the profit of the deposit account.

Workflow:

1. User inputs initial amount of money. (Use “prompt” function).
2. User inputs number of years. (Use “prompt” function).
3. User inputs percentage of a year. (Use “prompt” function)
   Percentage of a year - percentage of the all amount earned every year by the owner of the money.
   **Warning**: Every year amount changes. (Check example)
4. You need to validate the input data: three values should be numbers, initial amount can’t be less than 1000, number of years can’t be less than 1, percentage can’t be bigger than 100.
5. If input data isn’t valid, you should show message “Invalid input data”. (Use “alert” function).
6. You need to calculate total profit and total amount.
7. Show message: (example). Use ”alert” function

   Initial amount: 1000
   Number of years: 3
   Percentage of year: 10

   Total profit: 331.00
   Total amount: 1331.00

   You should show only 2 numbers after comma (if needed).
   Number of years can be only integers.

   Example:
   Initial amount: 1000
   Number of years: 2
   Percentage of year: 10

   1 Year
   Total profit: 100 (10% from initial amount)
   Total amount: 1100 (initial amount + total profit)

   2 Year

Total profit: 210 (previous profit + 10% from previous total amount (1100))
Total amount: 1210 (initial amount + total profit)

**Task 2**. Your task is to write a simple simulator of casino roulette.

Requirements:

Step 1:

- Create a prompt window (use confirm()). Show the message inside the window 'Do you want to play a game?'.
- In case the user clicks the 'Cancel' button, the message 'You did not become a billionaire, but can.' should be shown (use alert).

Step 2:

- If user clicked 'Ok' – start a game: randomly (use Math.random()) choose an integer number in range [0; 8] (including 0 and 8) and ask user to enter a number of pocket on which the ball could land (use prompt()).
- User has 3 attempts to guess a number.
- If user guessed the number on which ball landed, on 1-st attempt prize is 100$ (maximum prize for current numbers range), 2-nd attempt – 50$, 3-rd attempt – 25$.
- If user did not guess a number show the message 'Thank you for your participation. Your prize is: … $' (Use alert) and ask if he wants to play again (use confirm).

Step 3:

- If user did guess - Show the message 'Congratulation, you won!  Your prize is: … $. Do you want to continue?'.
- If user does not want to continue – show the message 'Thank you for your participation. Your prize is: … $' (Use alert) and ask if he wants to play again (use confirm).
- If user does want to continue, make number range bigger at 4 as the previous one (for example [0; 8] -> [0; 12]), and two times bigger maximum prize (for example on 1-st attempt prize will be 200$, 2-nd attempt – 100$, 3-rd attempt – 50$). Prize must be added to the previous one and number of attempts should be set to 3 (user should have 3 attempts to guess a number for each numbers range)
- Each time you ask user to enter a number you should show him a range of cells, how much attempts he has left, his total prize and possible prize on current attempt. See Figure 1:
- All these stuffs should be repeated until user lose or decide to quit

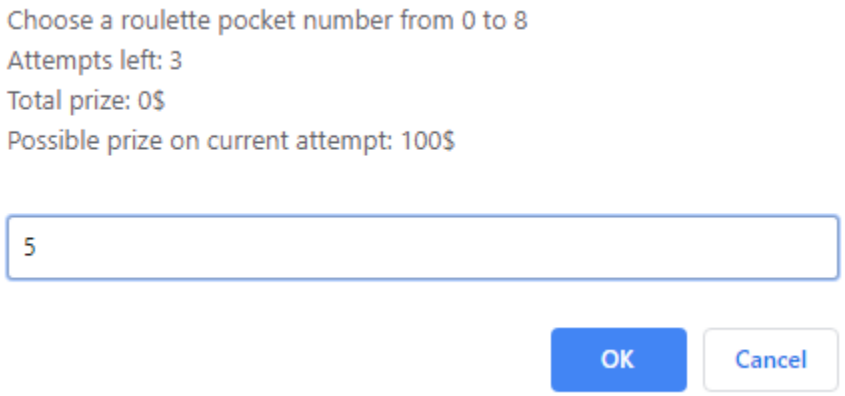


Figure 1 – The prompt window