

Problem 1: A terrible password

Using passwords based on your personal information, such as name, country of origin or favorite hobby is a terrible idea. Any hacker can use social engineering and tools like Johnny (<https://www.youtube.com/watch?v=C9wP49Z2JBQ>) to crack your password.

Build a program that asks for three inputs from the keyboard

- Your first name
- Last name
- Your birthday in the following date format: dd/mm/yyyy

Then, it should print to the console a password using the following pattern:

- First two digits of the first name in lowercase
- 2 digits of the month
- 4 digits of the month
- Last name

Challenge!

- Validating date inputs is complicated. For once, not all months have the same number of days: January has 31, and September has 30. Can you think of 5 validations that you would need to do on a date written using the dd/mm/yyyy format? Write them down in your notebook.

Problem 2: Minimum requirements for voting

In most countries around the world, voting on your local elections through an online portal is not allowed. In 2023, this seems so backward... but is there a good reason for it? <https://www.youtube.com/watch?v=LkH2r-sNjQs>

Build a program that will be used at a voting booth to allow a citizen to vote in a local election or not. Only people who meet ALL the conditions can cast their vote:

- The person must be at least 18 years old.
- The person must be a Mexican resident.
- The person must live in the zip code range of 64700 to 64790.
- Must have a valid ID number. A valid ID number consists of 5 characters, starting with the letter Z, followed by 4 numbers. For example: Z0123.