

## HW4

- **Number with Different Basis**
  - 1- Write code to convert a decimal number into its binary representation.
  - 2- Write code to convert a binary number into its hexadecimal representation.
  - 3- Write code to convert a hexadecimal number into its binary representation

**Note:** You need to include the following:

1. Prompt the user to enter the required input.
2. Ensure that the input provided is valid.
3. If the input is invalid, prompt the user to enter again until valid input is received, using a while loop.
4. Valid input criteria should be specified according to the requirements of each task (e.g., valid input ranges for binary numbers, decimal numbers, etc.).