Data
Image Size: Number of pixels (dynamic based on file)
Image Data: 2D array of integers (variable size)
Character Representation: 2D array of characters (variable size)
File Name: string (input by user)
Brightness Values: array of integers (from file)
Player Name: string
Edited Image: 2D array of integers (variable size)
Menu Choice: character (input by user)

This design document outlines the structure and functionality of an image manipulation program in C. The program will read and display grayscale images represented by numerical brightness values, with corresponding characters used for rendering. Users can load, display, edit, and save images. The editing options include cropping, dimming, brightening, and rotating the image.

Functions
main()
Data: Image data, character representation, menu choice.
Functionality: Initialize image data structure, display main menu options based on user input, call corresponding functions, loop until the user chooses to exit.

load_image()
Input Parameters: Image array, character representation array, pointer to size, filename.
Returned Output: void
Functionality: Read image data from the file into the image array and initialize the character representation based on brightness values.

display_image()
Input Parameters: Character representation array, size.
Returned Output: void
Functionality: Display the current image using characters based on brightness values.

edit_image()
Input Parameters: Image array, character representation array, size.
Returned Output: void
Functionality: Provide options to crop, dim, brighten, and rotate the image.

Additional Edit Functions (e.g., crop_image(), dim_image(), brighten_image(), rotate_image(), save_image())
Functionality: Implement specific edit operations on the image array based on user choices.