**Main Pseudocode:**

Data:

Given Data:

Given two dices each having six faces containing numbers from 1 to 6.

Unknown Data:

n.a.

Plan:

//Subproblem1:

Create a text file named “players.txt”. Input 10 players name including the Name, Balance, and Money won.

//SubProblem2:

Get the input from the user ie. Ask the user to roll a dice.

//SubProblem3:

If the sum of two faces in 7 or 11 then mark that the player win.

If the sum is 2, 3, or 12. Then the player loses.

If the sum is 4, 5, 6, 8, 9, or 10 on the first throw than the sum becomes the players point.

The player continues to roll the dice until he gets the same number to win the game or 7 to lose the game.

//Subproblem4:

If the players win add 10 to is balance

If player loses deduct 1 from his balance.

**Function Pseudocode1:**

//Function Name: Menu

Input:

num: Choose a number from the given MENU.

Output:

Data:

n.a.

Plan:

//Plan1:

Create a MENU that prompts user input number from 0 to 4.

//Plan2:

//Subplan1:

If user inputs 0 then ask user to add balance to the chosen players. Create a new function to do so.

//Subplan2:

If the user inputs 1, then allow the user to roll a dice. Calculate his/her win/loss accordingly. Such process can be done by creating a new function.

//Subplan3:

If user inputs 2, then display the lists of top 5 players in terms of balance. New function is created to perform it.

//Subplan4:

If user inputs 3, then display the lists of top 5 players in terms of money won. New function is created to perform it.

//Subplan5:

If user inputs 4, then exit the program.

**Function Pseudocode2:**

//Function Name: Add\_balance

Input:

name: Get the name of the player.

bal: Input the amount you would like to add on his prev. given balance.

Output:

n.a with side effect total\_bal: Calculate the amount after adding the balance.

Data:

n.a.

Plan:

//Subplan1:

Ask user to input the name of the player of whose they would like to add the balance.

Ask user to input the amount they would like to add in their prev. balance

//Subplan2:

Calculate the total balance of the player.

//Subplan3:

When the user is done adding the balance. Display the main MENU.

**Function Pseudocode3:**

//Function Name: Play\_game

Input:

name: Enter the player name.

Press Enter to play the Game.

Output:

n.a.

side effects

Won: Display the amount that player won.

Loss: Display the amount that player lose.

Data:

N.a.

Plan:

//Subplan1:

Get the plyers name and start rolling the dice.

//Subplan 2:

If the sum of two faces in 7 or 11 then mark that the player win.

If the sum is 2, 3, or 12. Then the player loses.

If the sum is 4, 5, 6, 8, 9, or 10 on the first throw than the sum becomes the players point.

The player continues to roll the dice until he gets the same number to win the game or 7 to lose the game.

//Subplan3:

Calculate win/loss amount after the game is played.

//Subplan4:

Ask user to continue playing or go to the main MENU.

**Function Pseudocode4:**

//Function Name: Top\_five\_balance

Input:

num: When user enter 2 as an input.

Output:

n.a. with side effects the list of top 5 players in terms of balance.

Data:

n.a.

Plan:

//Subplan1:

Get the input number 2 from the user.

//Subplan2:

Lists all the top 5 players in terms of balance.

//Subplan3:

After displaying name display the main MENU.

**Function Pseudocode5:**

//Function Name: Top\_five\_won

Input:

num: When user enter 3 as an input.

Output:

n.a. with side effects the list of top 5 players in terms of money won.

Data:

n.a.

Plan:

//Subplan1:

Get the input number 3 from the user.

//Subplan2:

Lists all the top 5 players in terms of money won.

//Subplan3:

After displaying name display the main MENU.