Understanding the Problem

This assignment is asking me to create a program that will simulate a game of bowling that can have up to 5 players. The scoring is dependent on random numbers so there will be no user input regarding frame by frame turns. The only input required is the number of players participating in game at the beginning.
Input/Output
The input from the user will only be the number of players participating in game at the start of the program and pressing the enter key to roll a random number.
The output will be text to the consol. What frame the program is on, the number of pins the player knocked down, and the score sheet.
I am assuming that the user only has a part up to 5 people, there are only 10 frames in this game of bowling, and that the names of the people in the group are Player n with n 1 <= n <= 5.

Subtasks

The subtasks I will need to complete consist of creating a function to display the score sheet, creating an array that can adapt to any number of players with dynamic arrays to support any number of people, calculate and set the score with rand for each player during their turn, determine strikes and spares, keep count of pins left, and at the score array contain the total score. I also need to implement a way for the strike to modify the points of the next turn for that player since a strike.

Program Design
Pseudocode

Main(){
Int players;
Print to console asking for number of player
Cin >> players;
test input for good or bad
if(input == bad)
        Reprompt user for input

Create array for players and score for each player

for(int I = 0; I < players; i++){ //do this for loop 10 times for 10 frames
        call function to do turns //turn 1 for player i
        print score sheet after turn is taken

after all frames, call table() once more and display winner.

}

```
void turns(player and player's score){
        int pins = 10;
        print out "Player # turn, press enter to roll"
        use rand to get a number from 0 to 10
        pins = pins – rand()
        cout << "You knocked over " << 10 – pins << "pins";
        call table functions to display score
        repeat once more if pins > 0
        }
void table(){
        take in player array and score array
        print table with values in the right places
}
```

Variables to create:
basic integers for amount of pins in turns() function and number of players
Dynamic arrays for player and score

Decisions:
Need to decide when a special circumstance takes place with pins (strike, space etc)
how I want to proceed through 10 frames (simple for loop should work)
how to draw the table and put in values where they need to go

Drawing the score sheet, player turns, and calculating scores are all repeated.
I will create multiple functions for these repeated tasks which will make everything much easier.

Prompt	Input	Output
Press enter:	Aseaeda (with no enter after)	Does nothing, waits for enter
Press enter:	Sdsads *enter*	Proceeds with
How many players?	F	Please enter a number
How many players?	35	Proceeds with a game of 35
How many players?	1	Proceeds with a game of 1