



**UANL**

UNIVERSIDAD AUTÓNOMA DE NUEVO LEÓN



**FIME**

FACULTAD DE INGENIERÍA MECÁNICA Y ELÉCTRICA

**Universidad Autónoma de Nuevo León**  
**Facultad de Ingeniería Mecánica y Eléctrica**

## **STRUCTURED PROGRAMMING**

*Angela Monserrat García Olvera*

I.D: **1970247**

Career: Mechatronic Engineering

**“ADVANCES”**

Teacher: Satu Elisa Schaeffer

*February 2021 – June 2021*



## CRAPS

The most popular game of chance in casinos is the dice game known as "Craps", which consists of placing different bets on the result found by rolling two dice in the next roll or in an entire round.

The following program will execute the functions of the video game "Craps" using the C language. This game will have the following functions:

1. How do you play?
2. Play
3. Exit

When the program is executed, the main one is displayed, where the following video game functions will appear:

**1. HOW TO PLAY?** It will show the following on the screen:

When rolling the two dice, the sum of the points on the two upper faces is calculated, and to establish whether it has been won or lost according to the following:

There are two ways to win:

- a) Obtaining a score of 7 or 11 on the first throw.
- b) Obtaining a score of 4, 5, 6, 8, 9 or 10 in the first thrown, then said sum becomes the "point" or the "Compulsory shot", and the player must continue rolling the dice to achieve the same "point" again, before getting a 7 on a later roll.

There are also two ways to lose:

- a) Roll the dice once and get 2, 3 or 12 (known as "Craps"), that is, the house "wins".
- b) Roll 4, 5, 6, 8, 9 or 10 on the first throw and roll a 7 on the subsequent throw before repeating the original "point".

**2. PLAY:** Once you enter the option, the game will be automatically generated, that is, the numbers that you obtained from the two dice will be displayed in the same way, it will calculate the sum of the points on the two upper faces to establish if you have won or lost according to the weights.

```
The player has obtained a score of 3 + 1 = 4
Your point is 4
The player has obtained a score of 5 + 2 = 7
Sorry, the player LOSES
```

**3. EXIT:** As its name says, it will exit the program after selecting that option.

**EXTRA IDEA:** Implement a betting system where the program asks the player to enter a bet less than or equal to 5 dollars, which is his bank. If the player wins, the bet is added to the bank's amount and printed. If the player loses, the bet is reduced to the bank's amount and printed. Also check if the bank has become 0, and if so, print the message "¡I am sorry, you are broke! ".

