21 Beer Bottles Game

1. In this game, there are 21 Beer bottles and 2 players – You and Computer.
2. You and Computer would pick up the Beer bottles one by one.
3. At a time, any no. of beer bottles can be picked up between 1 and 4 (inclusive)
4. The one, who will have to pick up the last bottle, is the loser and will have to pay the bill.

Design and implement a game, making use of Artificially Intelligent algorithm, so that if user is playing first, then the Computer would pick up the bottles intelligently each time, and the Computer would always win. The Computer would never lose.

Design a **C++** application, which would display below message at the start of the game.

```
There are 21 beer bottles...
There are 2 players - Computer and you.
At a time, each one can pick up any no. of bottles
between 1 and 4 (inclusive)
Will you like to play first?
```

If the User types 'Yes' and presses 'Enter' key, the next lines of output would be

```
Will you like to play first?
Yes
How many you would like to pick up?
```

If you pick up 3 bottles initially and press ‘Enter’ to observe how many the Computer picks now, then as per your intelligent algorithm, the Computer needs to pick up any no. of bottles between 1 and 4 (inclusive), so that at the end, the Computer would WIN. The next set of output would be.

```
How many you would like to pick up?
3
Computer has picked 2
The bottles remaining are: 16
How many you would like to pick up?
```

The User must be able to continue the game with Computer, and at every step the remaining bottles need to be displayed appropriately. The no. of remaining bottles would get decreased at each step.

```
How many you would like to pick up?
2
Computer has picked 3
The bottles remaining are: 11
How many you would like to pick up?
3
Computer has picked 2
The bottles remaining are: 6
How many you would like to pick up?
4
Computer has picked 1
```

As per this artificially intelligent program, the Computer should always win and never lose. If User will have to pick up the last beer bottle, then User is Loser and would have to pay the bill.

```
Computer has picked 1
The bottles remaining are : 1
You will have to pick up the last..you are loser
```

Please find below an entire program output from start to end to get an idea how algorithm needs to work