The "Crypto" game is a computer algorithm that generates a random number and asks the user to try to guess it. The algorithm takes input from the user at each step and compares the user's chosen number with the random number it has generated. The algorithm then returns to the user information about how close the chosen number is to the random number. This information may be the difference between the user-selected number and the random number, or it may simply be an update as to whether the user-selected number is greater or less than the random number. The user's goal is to find the random number in as few attempts as possible.

First, an object of the Crypt class is created which contains a random number between 1 and 1000. The user has 5 attempts to guess this number.

During the game, the user is asked to make a prediction about the number that is "hidden" in the object of the Crypt class. This number is compared to the random number found in the Crypt class object.

1) If the predicted number is less than the random number, a message is displayed indicating that the number is less.

2) If the predicted number is greater than the random number, a message is displayed indicating that the number is greater.

3) If the predicted number is equal to the random number, then the user wins the game.

4) If the user does not guess the number in the specified number of attempts, a failure message is printed and the number is revealed.

Essentially, the code checks if the user doesn't guess the number within the allowed attempts and then displays the message with the number they were about to guess.

The function getRandomNumber() returns the number that the player was going to guess, since it has already been generated at the beginning of the game and stored in the cryptGame object. This is done by calling the function CryptGame::getRandomNumber() This function simply returns the value of randomNumber, which is initialized in the class constructor using the std::rand() function, as mentioned above.

Therefore, the code of this game makes it possible to generate a random number, the function validateInput() takes care of checking for proper user input. This function has one parameter, input, which is the input given by the user. If the input is invalid, the function returns false, otherwise it returns true.

The play() function then starts the game. First, the displayIntro() function is called to display the game's intro message.

An object of the CryptGame class is then created, which generates a random number for the game. The play() function then enters a while loop, where it checks to see if the user has

made fewer than three attempts and hasn't found the random number yet. If these conditions are met, the playRound() function is called to play a round of the game. If the user finds the random number, the message "Congratulations! You've won the game!" and the game ends.