Write a program to generate a random number guessing game. The program should generate a random number between 1 and 100, and allow the user to guess the number. The user should be prompted to enter their guess, and the program should respond with either "Too high", "Too low", or "Correct!" depending on the user's guess.

#include <stdio.h>

#include <stdlib.h>

#include <time.h>

int main() {

    int random\_num, guess;

    srand(time(NULL)); // seed the random number generator with current time

    random\_num = rand() % 100 + 1; // generate a random number between 1 and 100

    printf("Welcome to the Number Guessing Game!\n");

    do {

        printf("Enter your guess (1-100): ");

        scanf("%d", &guess);

        if (guess < random\_num) {

            printf("Too low\n");

        } else if (guess > random\_num) {

            printf("Too high\n");

        } else {

            printf("Correct!\n");

        }

    } while (guess != random\_num);

    return 0;

}

***Explanation***

In this program, we first use the **srand()** function to seed the random number generator with the current time, which ensures that the random numbers generated by **rand()** are different each time the program is run. We then use the **rand()** function to generate a random number between 1 and 100, and store it in the **random\_num** variable.

We then use a **do-while** loop to prompt the user to enter their guess, and use a series of **if-else** statements to check if the guess is too low, too high, or correct. The loop continues until the user guesses the correct number.