

3. Write a program that generates a random number and asks the user to guess what the number is. If the user's guess is higher than the random number, the program should display "Too high, try again." If the user's guess is lower than the random number, the program should display "Too low, try again." The program should use a loop that repeats until the user correctly guesses the random number

```
import java.util.Random;
```

```
import java.util.Scanner;
```

```
public class NumberGuessingGame {
```

```
    public static void main(String[] args) {
```

```
        Random rand = new Random();
```

```
        int number = rand.nextInt(10) + 1; // Generate a random number between 1 and 10
```

```
        Scanner input = new Scanner(System.in);
```

```
        int guess;
```

```
        do {
```

```
            System.out.print("Enter your guess: ");
```

```
            guess = input.nextInt();
```

```
            if (guess > number) {
```

```
                System.out.println("Too high, try again.");
```

```
            } else if (guess < number) {
```

```
                System.out.println("Too low, try again.");
```

```
            }
```

```
        } while (guess != number);
```

```
        System.out.println("Congratulations, you guessed the correct number!");
```

```
    }
```

```
}
```