

```

1 package number_game;
2 import java.util.Random;
3 import java.util.*;
4
5 public class Number_Game
6 {
7     public static void main(String args[])
8     {
9         Scanner sc=new Scanner(System.in);
10        int choice=1;
11        do
12        {
13            System.out.println("Number Game!!");
14            System.out.println("Computer has generated a number between 0 to 100");
15            System.out.println("You have 5 chances to guess the right one");
16
17            Random r=new Random();//To generate random number
18            int genr_num=r.nextInt(0,100);
19
20            int chances=4,rounds=1;//no of chances to be given
21            int flag=0,score=10;
22            do{
23                System.out.println("\nGuess a number between 0 to 100");
24                int input=sc.nextInt();//user input
25
26                if(input==genr_num)
27                {
28                    chances=0;
29                    flag=1;
30                    break;
31                }
32                else
33                {
34                    //if not match,calculate gap
35                    int gap=genr_num-input;
36                    int diff=Math.abs(gap);//modulus of diff
37                    //assign hints
38                    if(diff<5)
39                        System.out.println("Hint:You are very Close");
40                    else if(5<=diff&&diff<15)
41                        System.out.println("You are Close");
42                    else if(15<=diff&&diff<30)
43                        System.out.println("You are Far");
44                    else
45                        System.out.println("You are very Far");
46
47                    System.out.println("Try again..You have "+chances+" chances left!!\n");
48                    chances--;
49                    score=score-2;
50                    rounds++;
51                }
52            }while(chances>=0);
53
54            if(flag==0)
55            {
56                score=0;
57                System.out.println("\nGENERATED NUMBER WAS: "+genr_num);
58                System.out.println("YOUR SCORE IS: "+score);
59                System.out.println("No more Chances Left.Better luck next time");
60            }
61            else if(flag==1)
62            {
63                System.out.println("Congratulations!!!\nYou have guessed it right\n Answer: "+genr_num);
64                System.out.println("Rounds taken to Guess = "+(rounds));
65                System.out.println("YOUR SCORE = "+score);
66            }
67        }
68    }
69 }

```

```
67         System.out.println("\nWant to play again?\nIf yes press 1 else press 0");
68         choice=sc.nextInt();//new game or no user input
69     }while(choice==1);
70 }
71 }
```