

REPORT



과 목 명 : design pattern

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1. for

```
#by.software 32151671 parkminhyeok
package homework3;
import java.util.Random;
import java.util.Scanner;

public class FindCard {

    public static void game(int n, int randomN) {
        for(; n!=randomN;) {

            if(randomN>n)
                System.out.println("higher");

            else if(randomN<n)
                System.out.println("lower");

            break;
        }
    }

    public static void check(int n, int randomN) {
        Scanner scanner=new Scanner(System.in);
        char checkChar;

        for(; ;) {
            System.out.println("more game?(y/n)");
            checkChar=scanner.next().charAt(0);

            if(checkChar=='n' || checkChar=='N')
                System.exit(0);

            else if(checkChar=='y' || checkChar=='Y')
                break;

            else
                System.out.println("Rword");
        }
    }
}
```

```
public static void main(String[] args) {
    Scanner scanner=new Scanner(System.in);
    int num;

    while(true)
    {
        int randomNumber=(int)(Math.random()*100);

        for(;;)
        {
            System.out.println("number input->");
            num=scanner.nextInt();
            game(num, randomNumber);

            if(num==randomNumber)
            {
                check(num, randomNumber);
                break;
            }
        }
    }
}
```

2. while

```
#by.software 32151671 parkminhyeok
package homework3;
import java.util.Random;
import java.util.Scanner;

public class FindCard {

    public static void game(int n, int randomN) {
        while(n!=randomN) {

            if(randomN>n)
                System.out.println("higher");

            else if(randomN<n)
                System.out.println("lower");

            break;
        }
    }

    public static void check(int n, int randomN) {
        Scanner scanner=new Scanner(System.in);
        char checkChar;

        while(true) {
            System.out.println("more game?(y/n)");
            checkChar=scanner.next().charAt(0);

            if(checkChar=='n' || checkChar=='N')
                System.exit(0);

            else if(checkChar=='y' || checkChar=='Y')
                break;

            else
                System.out.println("Rerword");
        }
    }
}
```

```
public static void main(String[] args) {
    Scanner scanner=new Scanner(System.in);
    int num;

    while(true)
    {
        int randomNumber=(int)(Math.random()*100);

        while(true)
        {
            System.out.println("number input->");
            num=scanner.nextInt();
            game(num, randomNumber);

            if(num==randomNumber)
            {
                check(num, randomNumber);
                break;
            }
        }
    }
}
```

3. do while

```
#by.software 32151671 parkminhyeok
package homework3;
import java.util.Random;
import java.util.Scanner;

public class FindCard {

    public static void game(int n, int randomN) {
        while(n!=randomN) {

            if(randomN>n)
                System.out.println("higher");

            else if(randomN<n)
                System.out.println("lower");

            break;
        }
    }

    public static void check(int n, int randomN) {
        Scanner scanner=new Scanner(System.in);
        char checkChar;

        while(true) {
            System.out.println("more game?(y/n)");
            checkChar=scanner.next().charAt(0);

            if(checkChar=='n' || checkChar=='N')
                System.exit(0);

            else if(checkChar=='y' || checkChar=='Y')
                break;

            else
                System.out.println("Rerword");
        }
    }
}
```

```
public static void main(String[] args) {
    Scanner scanner=new Scanner(System.in);
    int num;

    while(true)
    {
        int randomNumber=(int)(Math.random()*100);

        do
        {
            System.out.println("number input->");
            num=scanner.nextInt();
            game(num, randomNumber);

            if(num==randomNumber)
            {
                check(num, randomNumber);
                break;
            }
        }while(true);
    }
}
```

4. Result



```
<terminated> findcard [Java Application] C:\Program Files\Java\jdk-14\bin\javaw.exe (2020. 4. 5. 오전 6:10:26 - 오전 6:11:11)
number input->
50
higher
50-99
number input->
75
lower
50-75
number input->
63
lower
50-63
number input->
57
lower
50-57
number input->
53
higher
53-57
number input->
55
lower
53-55
number input->
54
more game(y/n)
y
!
```