

Print a, c, e... till the characters are less than z

alphabet

a i q w  
c j r y  
e k s  
m u  
g o

a  
b  
c  
d  
e  
f  
g  
h  
i  
j  
k  
l  
m  
n  
o  
p  
q  
r  
s  
t  
u  
v  
w  
x  
y  
z

ch.

```
for (char ch = 'a' ; ch < 'z' ; ch = (ch+2))
{
    Syso (ch).
}
```

maths.

```
public static void main(String[] args) {
    for(char ch = 'a' ; ch <= 'z' ; ch = (char)(ch + 2)){
        System.out.println(ch);
    }
}
```

~ char & loop

a...0  
b...1  
c...2  
d...3  
e  
f  
g

~ int & prop.

```
for(int i = 0; i < 26; i = i+2){
    System.out.println((char)('a' + i));
}
```

0 < 26  
2 < 26

i = 0 2

'a'

'a' + i  
97 + 2 = 99

'a' + 0  
97 + 0 = 97  
(char) (97)  
'a'

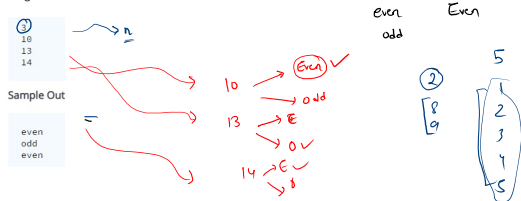
Print z, y, x.... till 26 characters

start = 'z'

ch --

```
1 import java.io.*;|
2 import java.util.*;
3
4 public class Solution {
5
6     public static void main(String[] args) {
7         for(char ch = 'z' ; ch >= 'a' ; ch--){
8             System.out.println(ch);
9         }
10    }
11 }
```

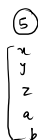
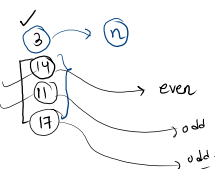
Print "even" or "odd" from a list of integers



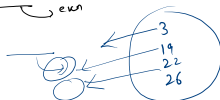
```
import java.io.*;
import java.util.*;

public class Solution {
    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        int n = scn.nextInt();

        for(int i = 1; i <= n; i++){
            int val = scn.nextInt();
            if(val % 2 == 0){
                System.out.println("even");
            } else {
                System.out.println("odd");
            }
        }
    }
}
```



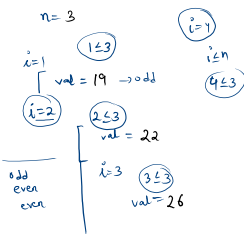
```
int n = scn.nextInt();
for (int i = 1; i <= n; i++) {
    int val = scn.nextInt();
    if (val % 2 == 0) {
        System.out.println("even");
    } else {
        System.out.println("odd");
    }
}
```



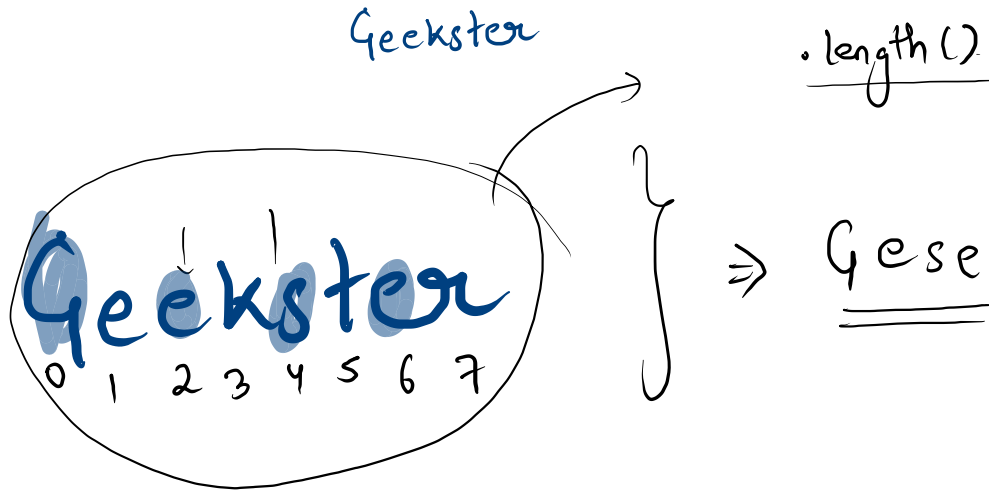
```
import java.io.*;
import java.util.*;

public class Solution {
    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        int n = scn.nextInt();

        for(int i = 1; i <= n; i++){
            int val = scn.nextInt();
            if(val % 2 == 0){
                System.out.println("even");
            } else {
                System.out.println("odd");
            }
        }
    }
}
```



## Print Alternate Elements of a String



```
import java.io.*;
import java.util.*;

public class Solution {

    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        String str = scn.next();

        for(int i = 0; i < str.length() ; i += 2){
            System.out.print(str.charAt(i));
        }
    }
}
```

# Reverse The String

hello → olleh

aman → nama

geeks → skeeg

len = 5  
0 4

hello  
0 1 2 3 4

4 3 2 1 0

start = len - 1

≥ 0

```
import java.io.*;
import java.util.*;

public class Solution {

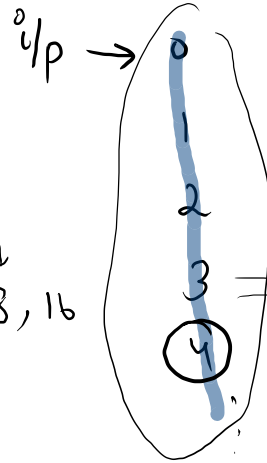
    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        String s = scn.next();

        for(int i = s.length()-1; i >= 0; i--){
            System.out.print(s.charAt(i));
        }
    }
}
```

nth power of 2

$$2^n$$

$$\text{res} = 1, 2, 4, 8, 16$$



	o/p	res
$2^0$	1	1
$2^1$		2
$2^2$		4
$2^3$		8
$2^4$		16
		$\vdots$

0	-	1
1	-	2
2	-	4
3	-	8
4	-	16
$\vdots$		$\vdots$

$$i/p = 4$$

$$\text{res} = 1$$

```
for (int i = 1; i <= n; i++) {  
    res = res * 2;  
}
```

$$i \leq 0$$

Code.  
pris.

syso(res).