

Q Even print

$n = 12$

$n = \text{number}$
even digits

0 2 4 6 8 10 12

①

```
for (int i = 0; i <= n; i++) {  
    if (i % 2 == 0) {  
        syso(i);  
    }  
}
```

②

```
for (int i = 0; i <= n; i++) {  
    if (i % 2 != 0) {  
        syso(i);  
    }  
}
```

③

```
for (int i = 0; i <= n; i += 2) {  
    syso(i);  
}
```

str = "Education"
 0 1 2 3 4 5 6 7 8

output = Eua in

sol string str = "Education";

i = 0 - str.length() - 1; +2

for (int i = 0; i <= str.length() - 1; i += 2) {
 Syso (str.charAt(i));

4

(8 <= 8)
 (8 <= 7)

memory length = 9
 str
 Education
 0 1 2 3 4 5 6 7 8

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

    for(int i=0; i<= str.length()-1; i+=2){
        System.out.print(str.charAt(i));
    }
    /* Enter your code here. Read input from STDIN. Print output to STDOUT. You
```

length = 8

str
 G e e k s t e r
 0 1 2 3 4 5 6 7 8
 x x x x x i

4

```

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

    for(int i=0; i<= str.length()-1; i+=2){
        ↪ System.out.print(str.charAt(i));
    }
    /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your
}

```

(8 <= 8-1)
(8 <= 7)

length = 8

str
G e e k s t e r
0 1 2 3 4 5 6 7 8
i i i i i i i i i

Ge se

error Index Out of Bound

indexing = 0 → length()-1 ⇒ 8

length = 8

$i = 0$ to ≤ 7 ⇒
 $i = 0$ to $\leq \text{length}() - 1$
 $i = 0$ to $< \text{length}()$

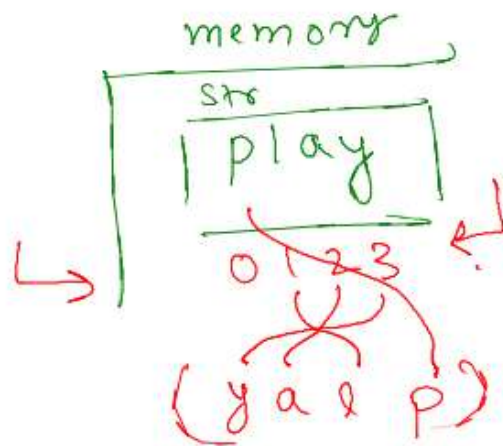
↓
7

} meaning same

Ques

str = "play";

output = "yalp"



for (str.length()-1 to 0)

charAt(i)

↓
exception

play ⇒ length
0 1 2 3
←

for (int i = str.length()-1; i >= 0; i--){
 sysout str.charAt(i);
}

4

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

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

✓
0 >= 0
-1 >= 0 ✗

str
| p l a y |

-1 0 1 2 3
i i i i i

String strAns = "";

opp = yalp

for(int i = str.length()-1; i >= 0; i--){

strAns += str.charAt(i);

}

syso (<u>strAns</u>);

yalp

str
p l a y
-1 0 1 2 3
i i i i i
strAns
yalp

Ques

$n = 3$

o/p $2^3 = 8$ print

$2 \times 2 \times 2$
`int ans = 1;`
`for (i = 1 to n) {`
 `ans * 2`
}

(ans) ✓

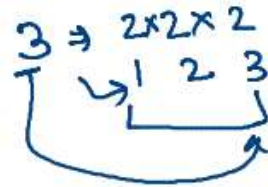
$ans = 1 \times 2 \times 2 \times 2$

$2 \times 2 \times 2$

$2 \times 2 \times 2 \times 2 =$

$2^4 = 2 \times 2 \times 2 \times 2$

```
public static void main(String[] args) {  
    Scanner scn = new Scanner(System.in);  
    int n = scn.nextInt();  
    int ans = 1;  
    for(int i=1; i<=n; i++){  
        ans = ans * 2;  
    }  
    System.out.println(ans);  
    /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your  
}
```



n
4

ans
1 2 4 8 16

multiply = $\neq 1$
add = 0

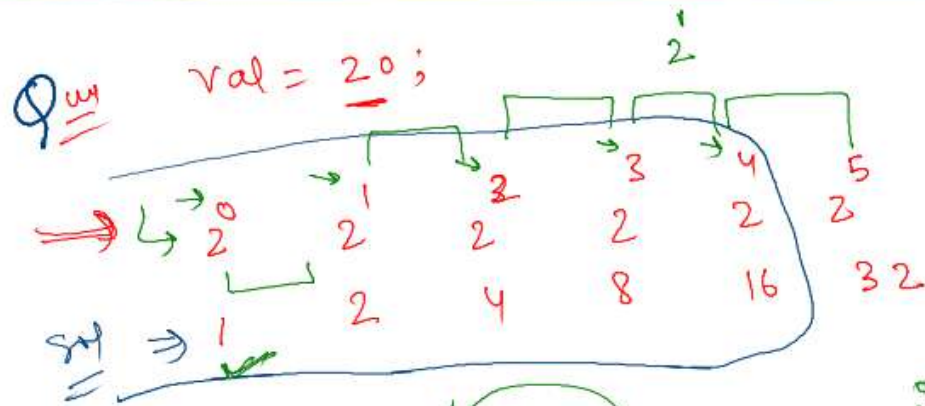
default

1 2 3 4 5

o/p $\Rightarrow 16$

\hookrightarrow St⁴ ending
 \hookrightarrow $i \times 2 \leq n$
ans $\times = 2$
Syso(ans) = 8

~~$4 \times 8 = 32$~~



$$\frac{3}{2} \rightarrow \frac{4}{2} = 2$$

$$\frac{3}{2} \times 2 = 2$$

for ($i = 1$ to $i < n$, $i \times 2$)
 \downarrow
 Syso(i);

power
 $i \times 2$
 operator

Syso
 1 2 4 8 16

i
 1 2 4 8
 16
 32

```

public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    int n = scn.nextInt();
    for(int i = 1 ; i < n; i *= 2){
        System.out.print(i + " ");
    }
}

```

$1 \times 2 = 2$
 $2 \times 2 = 4$
 $4 \times 2 = 8$
 $8 \times 2 = 16$
 $16 \times 2 = 32$

1 2 4 8 16

$n/3$

val = 24

$24/3 \rightarrow 8/3 \rightarrow 2$

$0/3 = 0/3 = 0$

for (int i = n ; i > 0 ; i /= 3) {
 sum(i);
 }

4

n

Q $n/3 \Rightarrow$

val = 24

$24/3 \rightarrow 8/3 \rightarrow 2$

$0/3 = 0/3 = 0$

for (int i = n; i > 0; i /= 3) {
 sum(i);
}

↳

```
public static void main(String[] args) {  
    Scanner scn = new Scanner(System.in);  
    int n = scn.nextInt();  
    for (int i = n; i > 0; i /= 3) {  
        System.out.print(i + " ");  
    }  
}
```

n
24

i
24
8 2 0

/* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class

}

O/p \Rightarrow 24 8 2

Qw $n = 15$

3 5 11 3% 5% 3 8 5

1 → 15 1 → 15

1 → 15

$i \mid (i \% 3 == 0 \mid \mid i \% 5 == 0)$

syso(i)

1 2 3 4 5 6 ... 15

1 2 3 4 5 6 ... 15

$(i \% 3 \mid \mid i \% 5) == 0$

```
public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    int n = scn.nextInt();
    for(int i=1; i<=n; i++){
        if(i%3==0 || i%5==0 || (i%3==0 && i%5==0)){
            System.out.print(i+" ");
        }
    }
}
```

/* Enter your code here. Read input from STDIN. Print output to STDOUT.

}

3 5 6 9 10 12 15

A	b	C	d	E	f	-	-	-	-	z
0	1	2	3	4	5					6

AAA

```

for ( i = 0; i < 26; i++) {
    if (i % 2 == 0) {
        char ch = (char) ('A' + i);
        syso(ch + "" + ch + "" + ch);
    }
    else {
        char ch1 = (char) ('a' + i);
        syso(ch1 + "" + ch1);
    }
}

```

✓