

John, a software developer, was tasked with writing a program to print the **vowels** in a given string. He created a **loop** to iterate over each character and check if it was a **vowel**. He tested it and it worked perfectly.

Input Format

For each test case, you will get a string **str**.

Constraints

```
1 <= n <= 10^4
String str contains only lower-case characters.
```

Output Format

Print the all **volwels** in a seperate line.

Sample Input 0

```
apple
```

Sample Output 0

```
a
e
```

Explanation 0

Vowel in the string **apple** is **a** and **e**.

apple
String a e

Orange

O
a
e

```
1 import java.io.*;
2 import java.util.*;
3
4 public class Solution {
5
6     public static void main(String[] args) {
7         Scanner sc = new Scanner(System.in);
8         String str=sc.next();
9         for(int i =0;i<str.length();i++){
10             char ch = str.charAt(i);
11             if(ch=='a' || ch=='e' || ch=='i' || ch=='o' || ch=='u')System.out.println(ch);
12         }
13     }
14 }
```

Sophie, a computer science student, wrote a program to print the **power of 17** from **1** to **n**, where **n** is taken as input from the user. She used the while loop to calculate the **power of 17** and tested it successfully. Sophie's professor was impressed with her programming skills and asked her to present her solution to the class.

Input Format

For each test case, you will get **n** as an integer input.

Constraints

$1 \leq n \leq 20$

Output Format

Print the power of **17** till **n** in a single line.

Sample Input 0

2

Sample Output 0

17 289

Explanation 0

$17^1=17$ $17^2=289$

Submitted Code

Language: Java 15

```
1 import java.io.*;
2 import java.util.*;
3
4 public class Solution {
5
6     public static void main(String[] args) {
7         Scanner sc = new Scanner(System.in);
8         int n = sc.nextInt();
9         long tmp=1;
10        for(int i=0;i<n;i++){
11            tmp*=17;
12            System.out.print(tmp+" ");
13        }
14    }
15 }
```

$$17^1 = 17$$

$$17^2 = 289$$

$$17^3 = \dots$$

$$\dots$$

$$tmp = 1;$$

$$\text{for}(i = 0)$$

$$tmp \times = 17$$

$$289$$

$$17^{\wedge}$$

$$1 - 0$$

$$n$$

$$17$$

As part of his programming assignment, Jack was required to write a program that would print each number from 1 to n on a new line. Jack used a loop to iterate over the numbers and printed each number on a new line. The program worked perfectly, and Jack submitted it on time.

Input Format

For each test case, you will get n as an integer input.

Constraints

```
1 <= n <= 1000
```

Output Format

Print each number on a new line.

Sample Input 0

```
5
```

Sample Output 0

```
1
2
3
4
5
```

Explanation 0

print numbers from 1 to 5.

Submitted Code

Language: Java 15

```
1 import java.io.*;
2 import java.util.*;
3
4 public class Solution {
5
6     public static void main(String[] args) {
7         Scanner sc = new Scanner(System.in);
8         int n = sc.nextInt();
9         int i=0;
10        while(++i<=n){
11            System.out.println(i);
12        }
13    }
14 }
15 }
```

~~for~~

• while ✓

i = 1 while(i <= n ✓

The rules of the FizzBuzz game are given below:

1. If a given number is divisible by **3** then the program should print "**Fizz**".
2. If a given number is divisible by **7** then the program should print "**Buzz**".
3. If a given number is divisible by both **3** and **7** then the program should print "**FizzBuzz**".
4. Otherwise print the given number as it is.

Input Format

For each test case, you will get **n** as an integer input.

Constraints

```
1 <= n <= 1000
```

Output Format

Print the output in a single line.

Sample Input 0

```
21
```

Sample Output 0

```
1 2 Fizz 4 5 Fizz Buzz 8 Fizz 10 11 Fizz 13 Buzz Fizz 16 17 Fizz 19 20 FizzBuzz
```

Explanation 0

Print the output according to given condition.

Submitted Code

Language: Java 15

```
1 import java.io.*;
2 import java.util.*;
3
4 public class Solution {
5
6     public static void main(String[] args) {
7         Scanner sc = new Scanner(System.in);
8         int n = sc.nextInt();
9         for(int i =1;i<=n;i++){
10             if(i%3==0 && i%7==0) System.out.print("FizzBuzz"+" ");
11             else if(i%3==0) System.out.print("Fizz"+" ");
12             else if(i%7==0) System.out.print("Buzz"+" ");
13             else System.out.print(i+" ");
14         }
15     }
16 }
```

$$n = 21$$

3

$$1. n \div 3 = 0$$

$$2. n \div 7 = 0$$

$$3. n \div 3 = 0 \text{ \&\& } n \div 7 = 0$$

$$4. \dots$$

Once upon a time, there was a young programmer named John who was working on a project. He needed to create a program that would print numbers from **20** up to a user-specified limit. John knew that he needed to use a loop to iterate over the numbers and print them out one by one.

He started by writing the code to take input from the user for the upper limit of the range of numbers. Once he had that value stored in a variable, he used a **for loop** to iterate over the range of numbers from **20** to **N**.

As the program ran, it printed out each number in the range, starting with **20** and ending with the user-specified value. John tested the program several times and was satisfied with how it worked.

Input Format

A single contain **N**

Constraints

```
20 <= N <= 10^4
```

Output Format

Print the numbers

Sample Input 0

```
30
```

Sample Output 0

```
20 21 22 23 24 25 26 27 28 29 30
```

Explanation 0

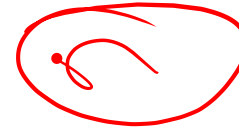
Print numbers from 20 to 30

Submitted Code

Language: Java 15

```
1 import java.io.*;
2 import java.util.*;
3
4 public class Solution {
5
6     public static void main(String[] args) {
7         Scanner sc = new Scanner(System.in);
8         int n =sc.nextInt();
9         int tmp=20;
10        while(tmp<=n){
11            System.out.print(tmp+" ");
12            tmp++;
13        }
14    }
15 }
```

20, 21, 22, ...



n=30

20, 21, 22, ...

