

## 1. arrange while

You want to find the first  $n$  natural even numbers. In what sequence should the following statements be rearranged to get the desired output? Assume that suitable indentation will be included.

```
1. if i%2 ==0:
2. i=2
3. print(i)
4. while (i<=2*n):
5. i+=1
```

Choose the correct answer from below:

- A. 1 3 4 2 5
- B. 2 4 1 3 5
- C. 2 4 3 1 5
- D. 4 2 1 3 5

## 2. Even Game

### Problem Description

Write a program to print all even numbers from **1 to N** where you have to take **N** as input from the user. Note: Use while-loop OR for-loop, according to session flow.

### Problem Constraints

```
1 <= N <= 1000000
```

### Input Format

A single line representing N

### Output Format

All even numbers from 1 to N are separated by spaces.

### Example Input

```
Input 1:
5
Input 2:
10
```

### Example Output

```
Output 1:
2 4
Output 2:
2 4 6 8 10
```

### 3. Odd Game

#### Problem Description

Write a program to print all odd numbers from **1** to **N** where you have to take N as input from user. Here **N** is inclusive.

#### Problem Constraints

$1 \leq N \leq 2000000$

#### Input Format

A single line representing **N**

#### Output Format

All **odd numbers** from 1 to N separated by spaces.

#### Example Input

Input 1:

5

Input 2:

10

#### Example Output

Output 1:

1 3 5

Output 2:

1 3 5 7 9

#### 4. Print perfect squares

##### Problem Description

Given a number **A**. Print all perfect squares less than or equal to **A**.

Notes - Perfect squares are integers whose square root is an integer.

##### Problem Constraints

$1 \leq A \leq 10^4$

##### Input Format

A single line consisting of a integer A.

##### Output Format

Print perfect squares less than or equal to A in a single line in a space-separated manner.

##### Example Input

Input 1:

20

Input 2:

100

##### Example Output

Output 1:

1 4 9 16

Output 2:

1 4 9 16 25 36 49 64 81 100

## 5. Floor of A/B

### Problem Description

Given two numbers **A** and **B**. Print the floor of **A/B**.

### Problem Constraints

$1 \leq A, B \leq 10^4$

### Input Format

There are two input lines

The first line has a single integer **A**.

The second line has a single integer **B**.

### Output Format

Print the floor of A/B in a single line.

### Example Input

Input 1:-

4

5

Input 2:-

16

2

### Example Output

Output 1:-

0

Output 2:-

8

### Example Explanation

Explanation 1:-

$\text{floor}(4/5) = 0$

Explanation 2:-

$\text{floor}(16/2) = 8$

## 6. Multiples of 4

### Problem Description

Given an integer input **N**, print all multiples of **4 less than or equal to N**.

### Problem Constraints

$1 \leq N \leq 10000$

### Input Format

Single line containing an integer N.

### Output Format

Space separated integers representing multiples of 4 less than or equal to N.

### Example Input

22

### Example Output

4 8 12 16 20

### Example Explanation

```
1 * 4 = 4
2 * 4 = 8
3 * 4 = 12
4 * 4 = 16
5 * 4 = 20
```

All are multiples of 4 less than 22

## 7. count execution

How many times will the following loop run?

```
c = 0
while c <= 10:
    print(c)
    if c % 2:
        c -= 1
    else:
        c += 1
```

Choose the correct answer from below:

A. 20

B. 10

C. Infinite Times

D. 5