

### Exercise 1: Calculate the multiplication and sum of two numbers

Given two integer numbers, return their product only if the product is equal to or lower than 1000. Otherwise, return their sum.

**Given 1:**

```
number1 = 20  
number2 = 30
```

**Expected Output:**

```
The result is 600
```

**Given 2:**

```
number1 = 40  
number2 = 30
```

**Expected Output:**

```
The result is 70
```

### Exercise 2: Print the sum of the current number and the previous number.

Write a program to iterate the first 10 numbers, and in each iteration, print the sum of the current and previous number.

**Expected Output:**

```
Printing current and previous number sum in a range(10)  
Current Number 0 Previous Number 0 Sum: 0  
Current Number 1 Previous Number 0 Sum: 1  
Current Number 2 Previous Number 1 Sum: 3  
Current Number 3 Previous Number 2 Sum: 5  
Current Number 4 Previous Number 3 Sum: 7  
Current Number 5 Previous Number 4 Sum: 9  
Current Number 6 Previous Number 5 Sum: 11  
Current Number 7 Previous Number 6 Sum: 13  
Current Number 8 Previous Number 7 Sum: 15  
Current Number 9 Previous Number 8 Sum: 17
```

### Exercise 3: Print characters from a string that are present at an even index number

Write a program to accept a string from the user and display characters that are present at an even index number.

For example, `str = "pynative"` so you should display 'p', 'n', 't', 'v'.

#### Expected Output:

```
Original String is  pynative
Printing only even index chars
p
n
t
v
```

### Exercise 4: Check if the first and last number of a list is the same

Given:

```
numbers_x = [10, 20, 30, 40, 10]
numbers_y = [75, 65, 35, 75, 30]
```

#### Expected Output:

```
Given list: [10, 20, 30, 40, 10]
result is True

numbers_y = [75, 65, 35, 75, 30]
result is False
```

### Exercise 5: Display numbers divisible by 5 from a list

Iterate the given list of numbers and print only those numbers which are divisible by 5.

**Expected Output:**

```
Given list is [10, 20, 33, 46, 55]
Divisible by 5
10
20
55
```

### Exercise 6: Print the following pattern

```
1
2 2
3 3 3
4 4 4 4
5 5 5 5 5
```

### Exercise 7: Check Palindrome Number.

A palindrome number is a number that is the same after reverse. For example, 545, is the palindrome numbers

**Expected Output:**

```
original number 121
Yes. given number is palindrome number

original number 125
No. given number is not palindrome number
```

### Exercise 8: Create a new list from two list using the following condition.

Given two list of numbers, write a program to create a new list such that the new list should contain odd numbers from the first list and even numbers from the second list.

Given:

```
list1 = [10, 20, 25, 30, 35]
list2 = [40, 45, 60, 75, 90]
```

Expected Output:

```
result list: [25, 35, 40, 60, 90]
```

### Exercise 9: Print a downward Half-Pyramid Pattern of Star (asterisk)

```
* * * * *
* * * *
* * *
* *
*
```

### Exercise 10: Print multiplication table from 1 to 10

```
1  2 3 4 5 6 7 8 9 10
2  4 6 8 10 12 14 16 18 20
3  6 9 12 15 18 21 24 27 30
4  8 12 16 20 24 28 32 36 40
5  10 15 20 25 30 35 40 45 50
6  12 18 24 30 36 42 48 54 60
7  14 21 28 35 42 49 56 63 70
8  16 24 32 40 48 56 64 72 80
9  18 27 36 45 54 63 72 81 90
10 20 30 40 50 60 70 80 90 100
```