Programming, Data Structures And Algorithms Using Python - Week 2

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Contents covered in Week 2 lectures:

- Assignment statement, basic types
- Strings
- Lists
- Control flow
- Functions

Program 1

Q. Write a Program to print following pattern using control flow statement

*

* *

* * *

* * * *

* * * * *

Program 2

Q. Write a Program to print following pattern using control flow statement

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

Program 3

Write a program to check if the given string is a palindrome

Input: rotator

Output: The given string is a palindrome

Input: python

Output: The given string is not a palindrome

Program 4

Write a program to check if the two strings are rotationally equivalent

Input: str1 = 'coding' and str2 = 'odingc'

Output: Yes

Input: str1 = 'world' and str2 = 'owrld'

Output: No

Program 5

Write a program to find the strongest neighbors

Input: [1, 3, 2, 4, 5]

Output: 3 3 4 5

Program 6

Write a program to print all the combinations of a list with 3 elements

Input: ['a', 'b', 'c']

Output:

a b c

a c b

b a c

b c a

c a b

c b a