

## 2) Conditional Expression

We can use conditional expressions to write compact conditional statements.

Syntax:

<expression - if - true> if <condition>  
else <expression - if - false>.

<condition> is a boolean expression that evaluates to either True or False.

Example:

```
n = 10  
result = "Even" if n % 2 == 0 else "Odd"  
print(result).
```

It returns <sup>exp</sup>true if condition is true or  
returns false if condition is false.

## 10. Difference between Deep copy and shallow copy

### Shallow copy

- creates a new object and copies the reference of the original object's element into new object

- Both the original and copied object point to the same memory locations for the element

### Deep copy

- Creates a new object and copies the actual values of all elements including any reference objects recursively.

- New object has its own independent memory locations for its elements

- If you modify an element in the copied object, it will also reflect in the original object.

- Modification made to the copied object will not affect the original.

- Slow to create.

- Faster to create