LAB 2 and 3

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Topic : Data Types , Type Conversion

⌄ Task 1: Print at least 5 types of data type

```python
# Int Data Type (5 Example)

a=12
b=13
c=14
d=15
e=19
print(a,b,c,d,e,)
print(type(a),type(b),type(c),type(d),type(e))
```

```
12 13 14 15 19
<class 'int'> <class 'int'> <class 'int'> <class 'int'> <class 'int'>
```

```python
# float data type (5 Examples )
a=12.2
b=4.5
c=5.3
d=43.4
e=55.5
print(a,b,c,d,e)
print(type(a),type(b),type(c),type(d),type(e))
```

```
12.2 4.5 5.3 43.4 55.5
<class 'float'> <class 'float'> <class 'float'> <class 'float'> <class 'float'>
```

```python
# Complex data type(5 Examples )
a=5j
b=2j
c=4j
d=0+3j
e=5+4J
print(a,b,c,d,e)
print(type(a),type(b),type(c),type(d),type(e))
```

```
5j 2j 4j 3j (5+4j)
<class 'complex'> <class 'complex'> <class 'complex'> <class 'complex'> <class 'complex'>
```

⌄ **Task 2:** Write example of type conversion for each (minimum 3)

```
a = 4
str_a = str(a)
print(type(str_a))
```

```
    <class 'str'>
```

```
b = 3.14
int_b = int(b)
print(type(int_b))
```

```
    <class 'int'>
```

```
c = True
int_c = int(c)
print(type(int_c))
```

```
    <class 'int'>
```

```
d="3+4j"
complex_d=complex(d)
print(type(complex_d))
```

```
    <class 'complex'>
```

⌄ **Task 3:** Assign multiple strings to single variable with your name , registration number, program , semester etc

```
Data = ["Name: Rameez","Reg: B22F0150AI102","program: AI","sem:4"]
print(type(Data))
print(Data)
```

```
    <class 'list'>
    ['Name: Rameez', 'Reg: B22F0150AI102', 'program: AI', 'sem:4']
```

⌄ **Task 4:** Write Your country name and access the last 3 characters

```
a="Pakistan"
print(a[5:8])
```

```
    tan
```

Task 5: Write code and observe using len() function it count space or not.

```
city ="Abbottabad" # without space
print(len(city))
city1= " Abbottabad " #with space
print(len(city1))
#Note : length function also counts spaces
```

```
10
12
```

Task 6: Write code to access the 2nd and 3rd character of your name using negative indexes.

```
name = "Rameez"
print(name[-5:3])
```

```
am
```

Task 7: Write python code in which you pass index number to format() function and arguments must be 4 and same code without indexes.

```
quantity = 3
item_no = 4050
price = 49.95

# Using format() without index numbers
print("I want {} pieces of item number {} for {} dollars.".format(quantity, item_no, price))
```

```
I want 3 pieces of item number 4050 for 49.95 dollars.
```

```
quantity = 3
item_no = 4050
price = 49.95

# Using format() with index numbers
print("I want {0} pieces of item number {1} for {2} dollars.".format(quantity, item_no, price))
```

```
I want 3 pieces of item number 4050 for 49.95 dollars.
```

Task 8: Take input from user and than display it like "John age is: age"

```python
# Take input from the user
name = input("Enter your name: ")
age = int(input("Enter your age: "))

# Display the formatted string
print(f"{name} age is: {age}")
```

```
Enter your name: Rameez
Enter your age: 21
Rameez age is: 21
```