Lect 4

built in functions

Float function

In [3]:
```
num_int = 10
print(type(num_int))
a = float(num_int)
print(a)
print(type(a))
```

```
<class 'int'>
10.0
<class 'float'>
```

In [5]:
```
a = "3.14"
print(type(a))
b = float(a)
print(b)
print(type(b))
```

```
<class 'str'>
3.14
<class 'float'>
```

int function

In [7]:
```
a = 5.632556554
print(type(a))
c = int(a)
print(c)
print(type(c))
```

```
<class 'float'>
5
<class 'int'>
```

In [9]:
```
a1 = "22"
print(type(a1))
b1 = int(a1)
print(b1)
print(type(b1))
```

```
<class 'str'>
22
<class 'int'>
```

str function

In [13]:
```
a = 56
print(type(a))
b = str(a)
print(b)
print(type(b))
c = "2"
print(b+c)
print(a+2)
```

```
<class 'int'>
56
<class 'str'>
562
58
```

In [15]:
```
x = 5.2655418548547
print(type(x))
y = str(x)
print(y)
print(type(y))
```

```
<class 'float'>
5.2655418548547
<class 'str'>
```

complex function

In [16]:
```
comp = complex(2,3)
```

In [17]:
```
print(comp)
```

```
(2+3j)
```

In [18]:
```
y = complex(6,89)
```

In [19]:
```
print(y)
```

```
(6+89j)
```

abs function

In [20]:
```
x = -23
print(abs(x))
```

```
23
```

In [21]:
```
y = -2.3585554
print(abs(y))
```

```
2.3585554
```

In [22]:
```
z = -3+4j
print(abs(z))
```

```
5.0
```

len function

In [23]:
```
a = "hello i am your educator swati"
print(len(a))
```

```
30
```

In [25]:
```
b = "cat dog"
print(len(b))
```

```
7
```

In [26]:
```
c = [12,25,7,8,9,2]
print(len(c))
```

```
6
```

Practice Questions

question 1

In [ ]:
```
In a game application, the player's score is stored
as a floating-point number. However, for leaderboard display,
you need to convert the score to an integer.
How would you use the int() function to convert the
player's score from floating-point to integer format?
pls solve this with code, player score = 1234.56
```

In [27]:
```
player_score = 1234.56
print("the player score is", int(player_score))
```

```
the player score is 1234
```

question 2

In [ ]:
```
In a customer relationship management (CRM) system
for a retail company, you have a database containing
customer records. How would you use the len() function
to find the total number of customers in the database,
allowing the company to track its customer base?

customer_database = [
    (1, 'John Doe', 'john@example.com'),
    (2, 'Jane Smith', 'jane@example.com'),
    (3, 'Alice Johnson', 'alice@example.com'),
]
```

In [28]:
```
customer_database = [
    (1, 'John Doe', 'john@example.com'),
    (2, 'Jane Smith', 'jane@example.com'),
    (3, 'Alice Johnson', 'alice@example.com'),
]
print("the total numer of customers in the database is", len(customer_database)
```

```
the total numer of customers in the database is 3
```

question 3

In [ ]:
```
You're developing a financial application that calculates simple interest.
The principal amount is 250000 Rs, the interest rate is 9.34567%,
and the time period is 3 years. Calculate the Simple Interest (SI),
and the final value should be an integer.
```

In [30]:
```
p = 250000
r = 9.34567
t =3
SI = ((p*r*t)/100)
print("the simple interest is",SI)
print("the integer value is", int(SI))
```

```
the simple interest is 70092.525
the integer value is 70092
```

In [ ]:
```

```

Homework

In [ ]:
```
You're working at a travel company, responsible for managing passenger informat
Due to a technical glitch in the booking system, some passengers'
ages were mistakenly recorded as negative values. However, age cannot be negat
and it's essential to correct this data inconsistency
before further analysis or reporting.

which function you will use to correct the ages of all passengers
in the dataset where negative ages were recorded due to a technical glitch?
```