

```
In [1]: var = "Hello World!"
print(type(var))

<class 'str'>
```

```
In [2]: var = 432
printnt(type(var))

-----
NameError                                Traceback (most recent call last)
C:\Users\PRATIK~1\AppData\Local\Temp\ipykernel_19656\2991737260.py in <module>
      1 var = 432
----> 2 printnt(type(var))

NameError: name 'printnt' is not defined
```

```
In [3]: var = 432
print(type(var))

<class 'int'>
```

```
In [4]: var = 443.434
print(type(var))

<class 'float'>
```

```
In [5]: var = 1+2j
print(type(var))

<class 'complex'>
```

```
In [6]: var = ['Mahindra', 'Tata', 'Kia', 'Maruti', 'Hyundai']
print(type(list))

<class 'type'>
```

```
In [7]: var = ['Mahindra', 'Tata', 'Kia', 'Maruti', 'Hyundai']
print(type(var))

<class 'list'>
```

```
In [8]: var = ('Mahindra', 'Tata', 'Kia', 'Maruti', 'Hyundai')
print(type(var))

<class 'tuple'>
```

```
In [9]: var = {'Mahindra', 'Tata', 'Kia', 'Maruti', 'Hyundai'}
print(type(var))

<class 'set'>
```

```
In [10]: var = [['Mahindra'], 'Tata', 'Kia', 'Maruti', 'Hyundai']
print(type(var))

-----
TypeError                                Traceback (most recent call last)
C:\Users\PRATIK~1\AppData\Local\Temp\ipykernel_19656\1299516978.py in <module>
----> 1 var = [['Mahindra'], 'Tata', 'Kia', 'Maruti', 'Hyundai']
      2 print(type(var))

TypeError: unhashable type: 'list'
```

```
In [11]: var = {'Mahindra', 'Tata', 'Kia', 'Maruti', 'Hyundai'}
print(type(var))

<class 'set'>
```

```
In [12]: var = {'name': 'Andrew', 'age': '23', 'gender': 'M'}
print(type(var))

<class 'dict'>
```

```
In [13]: var = range(10)
print(type(var))

<class 'range'>
```

```
In [14]: var = {'name': 'Andrew', 'age': '23', 'gender': 'M'}
for i in var:
    print(i)

name
age
gender
```

```
In [15]: var = {'name': 'Andrew', 'age': '23', 'gender': 'M'}
        for i in var.items():
            print(i)
```

```
('name', 'Andrew')
('age', '23')
('gender', 'M')
```

```
In [16]: var = {'name': 'Andrew', 'age': '23', 'gender': 'M'}
        for i in var.items():
            print(type(i))
```

```
<class 'tuple'>
<class 'tuple'>
<class 'tuple'>
```

```
In [17]: var = 'Alpha123'
        print(var.isalpha())
```

```
False
```

```
In [18]: var = 'Alpha123'
        var2 = var.isalpha()
        print(type(var2))
```

```
<class 'bool'>
```

```
In [19]: var = 'Alpha'
        bool = print(var.isalpha())
        print(bool)
```

```
True
None
```

```
In [20]: var = 'Alpha123'
        print(var.alnum())
```

```
-----
AttributeError                                Traceback (most recent call last)
C:\Users\PRATIK~1\AppData\Local\Temp\ipykernel_19656\1147607551.py in <module>
      1 var = 'Alpha123'
----> 2 print(var.alnum())

AttributeError: 'str' object has no attribute 'alnum'
```

```
In [21]: var = 'Alpha123'
        print(var.isalnum())
```

```
True
```

```
In [22]: var = 'Alpha123'
        print(type(var.isalnum()))
```

```
<class 'bool'>
```

```
In [23]: var = 'Alpha123'
        print(type(var.isascii()))
```

```
<class 'bool'>
```

```
In [24]: var = 'Alpha123'
        print(var.isascii())
```

```
True
```

```
In [25]: var = 'this is a statement'
        print(var.capitalize())
```

```
This is a statement
```

```
In [26]: var = 'this is a statement'
        print(var.encode())
```

```
b'this is a statement'
```

```
In [27]: var = 'this is a statement'
        print(var.center())
```

```
-----
TypeError                                Traceback (most recent call last)
C:\Users\PRATIK~1\AppData\Local\Temp\ipykernel_19656\68687531.py in <module>
      1 var = 'this is a statement'
----> 2 print(var.center())

TypeError: center expected at least 1 argument, got 0
```

```
In [28]: var = 'this is a statement'
        print(var.center(5))
```

```
this is a statement
```

```
In [29]: var = '123'
print(var.isnumeric())
```

True

```
In [30]: list = [123, 'Maths', 142, 'English']
for i in list:
    if i == i.isnumeric():
        print(i)
```

```
-----
AttributeError                                Traceback (most recent call last)
C:\Users\PRATIK~1\AppData\Local\Temp\ipykernel_19656/4076792611.py in <module>
      1 list = [123, 'Maths', 142, 'English']
      2 for i in list:
----> 3     if i == i.isnumeric():
      4         print(i)
```

AttributeError: 'int' object has no attribute 'isnumeric'

```
In [31]: list = [123, 'Maths', 142, 'English']
for i in list:
    if str(i) == i.isnumeric():
        print(i)
```

```
-----
AttributeError                                Traceback (most recent call last)
C:\Users\PRATIK~1\AppData\Local\Temp\ipykernel_19656/136304092.py in <module>
      1 list = [123, 'Maths', 142, 'English']
      2 for i in list:
----> 3     if str(i) == i.isnumeric():
      4         print(i)
```

AttributeError: 'int' object has no attribute 'isnumeric'

```
In [32]: list = ['123', 'Maths', '142', 'English']
list2 = []
for i in list:
    for j in i.split():
        if j.isdigit():
            list2.append(j)
print(list2)
```

['123', '142']

```
In [33]: list = ['123', 'Maths', '142', 'English']
list2 = []
for i in list:
    for j in i.split():
        if j.isdigit():
            list2.append(j)
print(type(list2))
```

<class 'list'>

In [ ]: