Operators

```
10+18*2-9/3
```

```
43.0
```

```
10//4
```

```
2
```

```
10//4.0
```

```
2.0
```

```
10.5//4
```

```
2.0
```

```
4^2<<3+48//24
```

```
68
```

```
-5//2//2
```

```
10>7==7<12
```

```
True
```

```
10>7==8<12
```

```
False
```

```
(10>7)==(8<12)
```

```
True
```

```
(10>7)==8<12
```

```
False
```

```
10>(7==8)<12
```

```
True
```

```
10>(7==8)<-1
```

```
False
```

```
10>7==(8<12)
```

```
False
```

```
10>1==(8<12)
```

```
True
```

```
bool(8)
```

```
True
```

```
8==True
```

```
False
```

Unicode Representation

```
alphaNumeric_string = "abcdefghxyzABCDEFGHXYZ0123456789"

for c in alphaNumeric_string:
  print("character: ", c)
  print("unicode value: ", ord(c))
```

```
character:  a
unicode value:  97
character:  b
unicode value:  98
character:  c
unicode value:  99
character:  d
unicode value:  100
character:  e
unicode value:  101
character:  f
unicode value:  102
character:  g
unicode value:  103
character:  h
unicode value:  104
character:  x
unicode value:  120
character:  y
unicode value:  121
character:  z
unicode value:  122
character:  A
unicode value:  65
character:  B
unicode value:  66
character:  C
unicode value:  67
character:  D
unicode value:  68
character:  E
unicode value:  69
character:  F
unicode value:  70
character:  G
unicode value:  71
character:  H
unicode value:  72
character:  X
unicode value:  88
character:  Y
unicode value:  89
character:  Z
unicode value:  90
character:  0
unicode value:  48
character:  1
unicode value:  49
character:  2
unicode value:  50
character:  3
unicode value:  51
character:  4
unicode value:  52
character:  5
unicode value:  53
character:  6
```

```
english = "VIRAT KOHLI"

tamil = "விராட் கோலி"

hindi = "विराट कोहली"

chinese = "维拉·科利"

print("English Unicode")
for c in english:
  print("Character: ", c)
  print("Unicode: ", ord(c))

print("Tamil Unicode")
for c in tamil:
  print("Character: ", c)
  print("Unicode: ", ord(c))

print("Hindi Unicode")
for c in hindi:
  print("Character: ", c)
  print("Unicode: ", ord(c))


print("Chinese Unicode")
for c in chinese:
  print("Character: ", c)
  print("Unicode: ", ord(c))
```

```
English Unicode
Character:  V
Unicode:  86
Character:  I
Unicode:  73
Character:  R
Unicode:  82
Character:  A
Unicode:  65
Character:  T
Unicode:  84
Character:
Unicode:  32
Character:  K
Unicode:  75
Character:  O
Unicode:  79
Character:  H
Unicode:  72
Character:  L
Unicode:  76
Character:  I
Unicode:  73
Tamil Unicode
Character:  வ
Unicode:  2997
Character:  ி
Unicode:  3007
Character:  ர
Unicode:  2992
Character:  ா
Unicode:  3006
Character:  ட
Unicode:  2975
Character:  ்
Unicode:  3021
Character:
Unicode:  32
Character:  க
Unicode:  2965
Character:  ோ
Unicode:  3019
```

```
Character:  ৬ৗ
Unicode:  2994
Character:  ী
Unicode:  3007
Hindi Unicode
Character:  व
Unicode:  2357
Character:  ि
Unicode:  2367
Character:  र
Unicode:  2352
Character:  ा
Unicode:  2366
Character:  ट
Unicode:  2335
Character:
```

```
name = "Venky"

for c in name:
  print("character: ",c)
  print("unicode value: ", ord(c))
  print("hex value: ",hex(ord(c)))
```

```
character:  V
unicode value:  86
hex value:  0x56
character:  e
unicode value:  101
hex value:  0x65
character:  n
unicode value:  110
hex value:  0x6e
character:  k
unicode value:  107
hex value:  0x6b
character:  y
unicode value:  121
hex value:  0x79
```

```
print(int('\x61'))
```

```
---------------------------------------------------------------------------
ValueError                                Traceback (most recent call last)
<ipython-input-24-799c1a5d9e66> in <cell line: 1>()
----> 1 print(int('\x61'))

ValueError: invalid literal for int() with base 10: 'a'
```

```
print('\x65')
```

```
e
```

Conditional Statements

if

elif

else

```
if <condition>:
  # code if the condition is satisfied
```

```
rupees = int(input("Money from father: "))

if rupees>=80:
  print("Buy Diary Milk Silk")
  print("Buy Milk for remaining rupees")

print("Condition is failed, comes out if statement")
```

```
Money from father: 10
Condition is failed, comes out if statement
```

```
gate_score = int(input("Enter your gate marks: "))

if gate_score>=40:
  print("You have cleared the GATE Exam")
else:
  print("Its Unfortunate this year, better luck next time")

print("comes out of if and else")
```

```
Enter your gate marks: 50
You have cleared the GATE Exam
comes out of if and else
```

```
gate_score = int(input("Enter your gate marks: "))

if gate_score>=40:
  print("You have cleared the GATE Exam")
else:
  print("Its Unfortunate this year, better luck next time")

print("comes out of if and else")
```

```
Enter your gate marks: 35
Its Unfortunate this year, better luck next time
comes out of if and else
```

```
marks = 92

if marks>=90:
  print("Grade S")
elif 80<=marks<90:
  print("Grade A")
elif 70<=marks<80:
  print("Grade B")
else:
  print("Grade D")
```

```
Grade S
```

```
marks = 86

if marks>=90:
  print("Grade S")
elif 80<=marks<90:
  print("Grade A")
elif 70<=marks<80:
  print("Grade B")
else:
  print("Grade D")
```

```
Grade A
```

```
marks = 72

if marks>=90:
  print("Grade S")
elif 80<=marks<90:
  print("Grade A")
elif 70<=marks<80:
  print("Grade B")
else:
  print("Grade D")
```

```
Grade B
```

```
marks = 24

if marks>=90:
  print("Grade S")
elif 80<=marks<90:
  print("Grade A")
elif 70<=marks<80:
  print("Grade B")
else:
  print("Grade D")
```

```
Grade D
```

```
marks = 60

if marks>=90:
  print("Grade S")
elif marks>=80:
  print("Grade A")
  print('1')
  print('2')
elif marks>=60:
  print("Grade B")
else:
  print("Grade D")

print("came out of conditional statement")
```

```
Grade B
came out of conditional statement
```

Nested if

```
scores = int(input("Enter your batting score: "))

if scores>=90:
  if scores>100:
    print("Wow, thats a fabulous performance")
    print("Man of the match to u")
  else:
    print("Unfortunate, you missed a century")
else:
  print("Score less than 90")
```

```
---------------------------------------------------------------------------
KeyboardInterrupt                         Traceback (most recent call last)
<ipython-input-48-38531a6ce3ed> in <cell line: 1>()
----> 1 scores = int(input("Enter your batting score: "))
      2
      3 if scores>=90:
      4   if scores>100:
      5     print("Wow, thats a fabulous performance")

1 frames
/usr/local/lib/python3.10/dist-packages/ipykernel/kernelbase.py in _input_request(self, prompt, ident,
parent, password)
    893             except KeyboardInterrupt:
    894                 # re-raise KeyboardInterrupt, to truncate traceback
--> 895                 raise KeyboardInterrupt("Interrupted by user") from None
    896             except Exception as e:
    897                 self.log.warning("Invalid Message:", exc_info=True)

KeyboardInterrupt: Interrupted by user
```