```
#Georgia Sugisandhea_535230080
print('Hello World')
```

```
Hello World
```

```
x=5
y=6.7
```

```
print("Nilai variabel x = " + str(x))
print("Nilai variabel y = " + str (y))
print("Nilai variabel x = ", x)
print("Nilai variabel y = ", y)
```

```
Nilai variabel x = 5
Nilai variabel y = 6.7
Nilai variabel x =  5
Nilai variabel y =  6.7
```

```
z1 = x + y
z2 = x - y
z3 = x * y
z4 = x / y

print("Nilai variable z1 = ",z1)
print("Nilai variable z2 = ",z2)
print("Nilai variable z3 = ",z3)
print("Nilai variable z4 = ",z4)
```

```
Nilai variable z1 =  11.7
Nilai variable z2 =  -1.7000000000000002
Nilai variable z3 =  33.5
Nilai variable z4 =  0.7462686567164178
```

```
a = 5
b = 2
c1 = a ** b
c2 = a % b

print("Nilai c1 adalah ",c1)
print("Nilai c2 adalah ",c2)
```

```
Nilai c1 adalah  25
Nilai c2 adalah  1
```

```
str = 'Belajar pemrograman Python'
print(str)
```

```
Belajar pemrograman Python
```

```
import sys
print(sys.version)
```

```
3.12.1 (tags/v3.12.1:2305ca5, Dec  7 2023, 22:03:25) [MSC v.1937 64 bit (AMD64)]
```

```
if 5>2:
    print("Lima lebih besar dari dua")
```

```
Lima lebih besar dari dua
```

```
if 5>2:
print('Lime lebih besar dari dua!')
```

```
  Cell In[3], line 2
    print('Lime lebih besar dari dua!')
    ^
IndentationError: expected an indented block after 'if' statement on line 1
```

```
#Ini komentar (comment)
print("Hello, World!")
```

```
print("Hello, World!")#Ini komentar (comment)
```

```
Hello, World!
Hello, World!
```

```
x = 5
y = "John"
z = 3.14
print(type(x))
print(type(y))
print(type(z))
```

```
<class 'int'>
<class 'str'>
<class 'float'>
```

```
x1 = "John"
# kutip ' ' dan " " sama
x2 = 'John'
print(x1)
print(x2)
```

```
# case sensitive
a = 4
A = "Empat"
print(a)
print(A)
```

```
4
Empat
```

```
#penamaan variable yang diperbolehkan

myvar = "John"
my_var = "John"
_my_var = "John"
myVar = "John"
MYVAR = "John"
myvar2 = "John"
```

```
#penamaan variable yang tidak diperbolehkan

2myvar = "John"
my-var = "John"
my var = "John"
```

```
x, y, z = 'Orange', 'Banana', 'Cherry'
print(x)
print(y)
print(z)
```

```
Orange
Banana
Cherry
```

```
x = y = z = 'Orange'
print(x)
print(y)
print(z)
```

```
Orange
Orange
Orange
```

```
#list
fruits = ['apple', 'banana', 'cherry']
print(fruits)
```

```
['apple', 'banana', 'cherry']
```

```
number = [1,2,3,4,5]
print(number)
```

```
mixed = [1, 'satu', 2, 'dua', 3, 'tiga']
print(mixed)
```

```
[1, 'satu', 2, 'dua', 3, 'tiga']
```

```
x,y,z = fruits
print(x)
print(y)
print(z)
```

```
apple
banana
cherry
```

```
print(fruits[0])
print(fruits[1])
print(fruits[2])
print(fruits[-2])
print(fruits[-1])
print(fruits[-3])
```

```
apple
banana
cherry
banana
cherry
apple
```

```
fruits = ['apple', 'banana', 'cherry', 'orange', 'kiwi', 'melon', 'mango']
print(fruits[2:5])
```

```
['cherry', 'orange', 'kiwi']
```

```
fruits=['apple', 'banana', 'cherry']
fruits.append('orange')
print(fruits)
```

```
['apple', 'banana', 'cherry', 'orange']
```

```
fruits = ["apple", "banana", "cherry"]
fruits.insert(1, "orange")
print(fruits)
```

```
['apple', 'orange', 'banana', 'cherry']
```

```
fruits = ["apple", "banana", "cherry"]
fruits[1] = "blackcurrant"
print(fruits)
```

```
['apple', 'blackcurrant', 'cherry']
```

```
fruits = ["apple", "banana", "cherry", "orange", "kiwi", "mango"]
fruits[1:3] = ["blackcurrant", "watermelon"] #3 is excluded
print(fruits)
```

```
['apple', 'blackcurrant', 'watermelon', 'orange', 'kiwi', 'mango']
```

```
x = "awesome"
print("Python is " + x)
```

```
Python is awesome
```

```
x = "awesome"
print("Python is ", x)
```

```
Python is  awesome
```

```
x = "Python is "
y = "awesome"
z = x+y
print(z)
```

```
Python is awesome
```

```
x = 5
y = 10
print(x+y)
```

```
15
```

```
x = 5
y = "Lima"
print(x+y)
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In[13], line 3
      1 x = 5
      2 y = "Lima"
----> 3 print(x+y)

TypeError: unsupported operand type(s) for +: 'int' and 'str'
```

```
x = ('apple', 'banana', 'cherry')
print(x)
```

```
('apple', 'banana', 'cherry')
```

```
x = range(6)
print(x)
```

```
range(0, 6)
```

```
x = {"name" : "John", "age" : 36}
print(x)
```

```
x = {"apple", "banana", "cherry"}
print(x)
```

```
{'apple', 'cherry', 'banana'}
```

```
x = frozenset({"apple", "banana", "cherry"})
print(x)
```

```
frozenset({'apple', 'cherry', 'banana'})
```

```
x = True
print(x)
```

```
True
```

```
x = b"Hello"
print(x)
```

```
b'Hello'
```

```
x = bytearray(5)
print(x)
```

```
bytearray(b'\x00\x00\x00\x00\x00')
```

```
x = memoryview(bytes(5))
print(x)
```

```
<memory at 0x000002745D6EBD00>
```

```
x = int(1)
y = int(2.8)
z = int("3")
print('x = ', x)
print('y = ', y)
print('z = ', z)
```

```
x =  1
y =  2
z =  3
```

```
x = float(1)
y = float(2.8)
z = float("3")
w = float("4.2")
print(x)
print(y)
print(z)
print(w)
```

```
1.0
2.8
3.0
4.2
```

```
#Mengiris String
b = "Selamat makan"
print(b[2:5])
```

```
lam
```

```
b = "Selamat makan"
print(b[:5])
```

```
Selam
```

```
fruits = ["apple", "banana", "cherry"]
tropical = ["mango", "pineapple", "papaya"]
fruits.extend(tropical)
print(fruits)
```

```
['apple', 'banana', 'cherry', 'mango', 'pineapple', 'papaya']
```

```
fruits = ["apple", "banana", "cherry"]
fruits.remove("banana")
print(fruits)
```

```
['apple', 'cherry']
```

```
a = 33
b = 200
if b>a:
    print("b is greater than a")
```

```
b is greater than a
```

```
a = 33
b = 33
if b>a:
    print("b is greater than a")
elif a==b:
    print("a and b are equal")
```

```
a and b are equal
```

```
a = 200
b = 33
if b>a:
    print("b is greater than a")
else:
    print("b is not greater than a")
```

```
      b is not greater than a
```

```
a = 200
b = 33
c = 500
if a>b and c>a:
    print("Both conditions are True")
```

```
      Both conditions are True
```

```
a = 200
b = 33
c = 500
if a>b or a>c:
    print("At least of the conditions is True")
```

```
      At least of the conditions is True
```

```
x = 41

if x>10:
    print("Above ten, ")
    if x>20:
        print("and also aboce 20!")
    else:
        print("but not above 20.")
```

```
      Above ten,
      and also aboce 20!
```

```
i = 1
while i<6:
    print(i)
    i += 1
```

```
      1
      2
      3
      4
      5
```

```
i = 1
while i<6:
    print(i)
    if i == 3:
        break
    i += 1
```

```
      1
      2
      3
```

```
i = 0
while i<6:
    i += 1
    if i == 3:
        continue
    print(i)
```

```
      1
      2
      4
      5
      6
```

```
fruits = ["apple", "banana", "cherry"]
for x in fruits:
    print(x)
```

```
      apple
      banana
      cherry
```

```
for x in "banana":
    print(x)
```

```
 b
 a
 n
 a
 n
 a
```

```
fruits = ["apple", "banana", "cherry"]
for x in fruits:
    if x == "banana":
        break
    print(x)
```

```
 apple
```

```
fruits = ["apple", "banana", "cherry"]
for x in fruits:
    if x == "banana":
        continue
    print(x)
```

```
 apple
 cherry
```

```
for x in range(6):
    print(x)
```

```
 0
 1
 2
 3
 4
 5
```

```
for x in range(2,6):
    print(x)
```

```
 2
 3
 4
 5
```

```
for x in range(2,30,3):
    print(x)
```

```
 2
 5
 8
 11
 14
 17
 20
 23
 26
 29
```

```
#nested loops
adj = ["red", "big", "tasty"]
fruits = ["apple", "banana", "cherry"]

for x in adj:
    for y in fruits:
        print(x,y)
```

```
 red apple
 red banana
 red cherry
 big apple
 big banana
 big cherry
 tasty apple
 tasty banana
 tasty cherry
```

```
#defining functions
def my_function():
    print("Hello from a function")


#calling the functions
my_function()
```

```
Hello from a function
```

```
#Arguments
def my_function(fname):
    print(fname + " Refsnes")

my_function("Emil")
my_function("Tobias")
my_function("Linus")
```

```
Emil Refsnes
Tobias Refsnes
Linus Refsnes
```

```
#return values
def my_function(x):
    return 5*x

print(my_function(3))
print(my_function(5))
print(my_function(9))
```

```
15
25
45
```