Python is an interpreted, high-level, general-purpose programming language. Created by Guido van Rossum and first released in 1991, Python’s design philosophy emphasizes code readability with its notable use of significant whitespace.

# Numbers

# integers 1 2 3 4 5

# float 1.2 5.6 9.5 10.50

# complex 5+2j

print(3 // 2)

# - \* / + \*\* %

**# variables , a-z , \_ , watch , Watch**

Watch\_price = 500

Customer\_Name = "karthik"

Watch1 = Name

1 = 750

print(Watch\_price)

print(Customer\_Name)

**# strings**

word = 'Hi'

word2 = " my age is 24 , why can't i vote "

para = """ this is my para """

word3 = "hello, world"

**# slicing , length , strip()**

print(word3[-5:-1])

print(len(para))

print(word2.strip())

print(word.lower())

print(word.upper())

a = 'raj'

print(a.replace('j', 'ju'))

print(a.split('a'))

print("hew" in word3)

a1 = 'hi'

a2 = ' karthik'

print(a1 + a2)

**# Boolean**

print(1 == 1)

# operators

# arthimetic

# =

# > < >= <=

# and or not

# is is not

# in not in

# & | ^ ~ << >>

number1 = 10

number1 /= 10

number2 = ghnumber1 + 20

**# casting**

a = float(10)

b = int(10.10)

c = str(120)

print(a, b, c)

**# type**

d = "h3"

print(type(d))

**# list**

fruits = ['apple', 'orange', 'cherry']

fruits[1] = 'banana'

fruits.append("new")

print(fruits)

number = [11, 2, 20, 0]

number.sort(reverse=True)

print(number)

add = fruits + number

print(add)

**# Tuples**

fruits = ('apple', 'orange', 'cherry')

print(fruits)

number = (11, 2, 20, 0)

print(number)

add = fruits + number

print(add)

**# Dictionary , get()**

my\_data = { "name": "karthik", "age": "24" }

# my\_data["age"] = "25"

print(my\_data.get("age"))

**# if statements**

age = 18

if age > 18:

print("you can vote in election")

elif age == 18:

print("apply for vote id")

else:

print("you have to wait till 18")

a, b = 10, 20

if a == 10 or b == 20:

# and , or nesting of if

print("correct")

if b == 20:

print("hi")

else:

print("incorrect")

**# functions def**

def addition(a, b):

print(a + b)

def subtraction(a, b):

print(a - b)

def hi(name):

print("Hi," + name)

def fun(a):

return a\*100

addition(12, 10)

addition(100, 300)

subtraction(50, 25)

hi("balu")

print(fun(5))

**# loops**

name = 'karthik'

**# for loop**

for letters in name:

print(letters)

fruits = ['apple', 'orange', 'banana']

for fruit in fruits:

print(fruit)

for i in "hi, welcome":

if i == ',':

# continue

print(", is present")

# break

else:

print(", is not present")

**#range 5 – 0,1,2,3,4**

for number in range(10, 30, 4):

print(number)

for number in range(5):

print(number)

for i in range(2):

print(i)

else:

print('all numbers are finished')

**# loops while**

i = 1

while i < 5:

# 5 < 5

print(i) i += 1

else:

print("over")

**# Lambda**

add\_5 = lambda number: number + 10

print(add\_5(25))

print(add\_5(120))

**# simple calculator**

def add(a, b):

return a+b

def sub(a, b):

return a-b

def mul(a, b):

return a.

b

def div(a, b):

return a//b

print("""Select operation

1.add

2.sub

3.mul

4.div

""")

choice = int(input("enter your choice"))

a = int(input("enter number 1"))

b = int(input("enter number 2"))

if choice == 1:

print(add(a, b))

elif choice == 2:

print(sub(a, b))

elif choice == 3:

print(mul(a, b))

elif choice == 4:

print(div(a, b))

else:

print("enter correct choice")

**# final task answer print()**

print('Hi, I can code in Python!')

print('''

My favourite animal is dog

o-###-

| | #

This is my home

\_ | \_

| |

|# |\_\_\_\_

| | |

| # | # |

\_|\_\_\_|\_#\_\_|\_

Now Puzzle time

''')

born = input('What year were you born?')

born = int(born)

age = 2025 - born

print('In the year 2025 you\'ll be', age, 'years old!')