**Keywords in python**

Python is a object oriented high level programming language it is easy to learn and code

It is a versatile language by using python we can create websites, analyzing data, building data and also operating robots

Python was developed by GUDIO VAN ROSAN in 1991

We use .py extension in python

**KEY FEATURES OF PYTHON**

Here’s a simpler version of the explanation:

**Easy to Learn**: Python is simple and uses English-like words, making it easy to understand and write.

**Interpreted Language**: Python runs code line by line, so you don’t need to compile it before running.

**High-Level Language**: Python helps you focus on solving problems rather than worrying about technical details.

**Dynamic Typing**: You don’t have to specify the type of a variable; Python figures it out automatically.

**Cross-Platform**: Python code works on any device, so you write it once and run it anywhere.

**Open Source**: Python is free to use, and you can modify it as needed.

Here are some keywords

(AND,OR,NOT),(IF,ELSE,ELIF),(WHILE,FOR,IN),(TRY,EXPECT,FINALLY),DEF,RETURN,IMPORT,CLASS,FROM,AS,TRUE,FALSE,NONE,IS,LAMBA,WITH,GLOBAL,NON-LOCAL

*# logical keywords  
#and*a=10  
b=20  
if a>5 and b>15:  
 print("a is greater than b")  
  
*# OR*a=10  
b=20  
if a>5 or b>15:  
 print('at leat one condition is true')  
  
*#not*a=False  
if not a:  
 print("a is false")  
  
*#conditional keywords  
#if*x=5  
if x>2:  
 print("x is greater than 2")  
  
*#else*if x>10:  
 print("x is greater than 10")  
else:  
 print("x is less than 10")  
  
*#elif*if x>20:  
 print("big")  
elif x>30:  
 print("small")  
else:  
 print("extra small")  
  
*#loops  
#for*a = 10  
for i in range(a):   
 print(i)  
  
  
*#while*k=1  
while k>10:  
 print(k)  
 k=k+1  
  
*#in*fruits = ["apple", "banana", "cherry"]  
for fruit in fruits:  
 print(fruit)

*#error handling  
#try*try:  
 num = int(input("Enter a number: "))  
 print(f"Square of the number is {num \*\* 2}")  
except ValueError:  
 print("Invalid input! Please enter a valid integer.")  
  
*#expect*try:  
 num = int("abc")  
except ValueError:  
 print("Invalid input! Please enter a number.")  
  
  
*#finally*try:  
 f = open("nonexistent.txt", "r")  
except FileNotFoundError:  
 print("File not found!")  
finally:  
 print("Execution finished.")  
  
*#def*def greet(name):  
 print(f"Hello, {name}!")  
  
*#return*def add(a, b):  
 return a + b  
  
result = add(3, 7)  
print(result)  
  
  
*#import*import random  
  
print(random.randint(1, 10))  
  
  
*# class*class Animal:  
 def sound(self):  
 print("This animal makes a sound.")  
  
cat = Animal()  
cat.sound()  
  
  
*#from*from math import sqrt  
  
print(sqrt(16))  
  
  
*#as*array = np.array([1, 2, 3])  
print(array)  
  
*#True*is\_valid = True  
if is\_valid:  
 print("The value is true!")  
  
*#False*is\_ready = False  
if not is\_ready:  
 print("The value is false!")  
  
*#None*x = None  
if x is None:  
 print("x is None!")  
  
*#is*a = None  
if a is None:  
 print("a is None!")  
  
*#lambda*multiply = lambda x, y: x \* y  
print(multiply(4, 5))  
  
*#with*with open("sample.txt", "w") as file:  
 file.write("Hello, world!")  
  
*#global*counter = 0  
  
def increment():  
 global counter  
 counter += 1  
  
increment()  
print(counter)  
  
*#nonlocal*def outer\_function():  
 value = 5  
  
 def inner\_function():  
 nonlocal value  
 value += 1  
 return value  
  
 return inner\_function()  
  
print(outer\_function())