Every Dream is Worth Pursuing



Python Programming





PYTHON PROGRAMMING



1. Variables and Data Types:

Integer variable x = 5 # Float variable y = 3.14 # String variable name = "John Doe" # Boolean variable is true = True

1. Operators:

```
# Arithmetic operators a = 5 + 3 b = 10 - 2 c = 4 * 2 d = 10 / 3 e = 5 \% 2 # Comparison operators result1 = 5 > 3 result2 = 10 <= 5 result3 = 4 == 4 result4 = 2 != 3 # Logical operators result5 = True and False result6 = True or Fa lse result7 = not True
```

1. Control Flow and Loops:

```
# If-else statement x = 10 if x > 5: print("x is greater than 5") else: print ("x is less than or equal to 5") # For loop fruits = ["apple", "banana", "ora nge"] for fruit in fruits: print(fruit) # While loop count = 0 while count < 5: print(count) count += 1
```

1. Functions:

```
# Defining a function def greet(name): return "Hello, " + name + "!" # Callin
g a function result = greet("Alice") print(result)
```

1. Lists:

```
fruits = ["apple", "banana", "orange"] fruits.append("grape") print(fruits
[0]) # Output: "apple"
```

1. Dictionaries:

```
person = {"name": "John", "age": 25, "city": "New York"} print(person["nam
e"]) # Output: "John"
```

1. Strings:

```
name = "John Doe" print(name[0:4]) # Output: "John"
```

1. Input and Output:

```
name = input("Enter your name: ") print("Hello, " + name + "!")
```

1. Error Handling:

```
try: result = 10 / 0 except ZeroDivisionError: print("Error: Cannot divide by
zero.")
```

1. Modules and Libraries:

```
import math result = math.sqrt(16) print(result)
```

1. File I/O:

```
# Writing to a file with open("data.txt", "w") as file: file.write("Hello, Wo
rld!") # Reading from a file with open("data.txt", "r") as file: content = fi
le.read() print(content)
```

These are just a few examples of common Python programming concepts. Feel free to explore each concept further and experiment with more advanced functionalities as you progress.

Do Follow for more Interesting

