

1. Print Statements and Syntax

Exercise 1: Print "Hello, World!"

```
print("Hello, World!")
```

Exercise 2: Print your name and age

```
print("My name is Lokesh")
```

```
print("I am 22 years old")
```

Exercise 3: Use a single print() to show multiple lines using \n

```
print("Line 1\nLine 2\nLine 3")
```

2. Variables and Data Types

Exercise 4: Assign values to variables: name, age, height

```
name = "Lokesh"
```

```
age = 22
```

```
height = 5.8
```

Exercise 5: Change the value of a variable and print the new value

```
age = 23
```

```
print(age)
```

Exercise 6: Use type() to print the type of each variable (int, float, str)

```
print(type(name))
```

```
print(type(age))
```

```
print(type(height))
```

3. Basic Operators

Exercise 7: Add, subtract, multiply, divide two numbers

```
a = 10
```

```
b = 3
print(a + b)
print(a - b)
print(a * b)
print(a / b)
```

Exercise 8: Use modulus (%) to find the remainder

```
print(a % b)
```

Exercise 9: Use exponentiation () to calculate power**

```
print(a ** b)
```

Exercise 10: Use floor division (//) to divide integers

```
print(a // b)
```

4. User Input

Exercise 11: Take user input for name and greet them

```
name = input()
print("Hello", name)
```

Exercise 12: Ask the user for two numbers and print their sum

```
num1 = int(input())
num2 = int(input())
print(num1 + num2)
```

Exercise 13: Convert input string to integer using int()

```
value = input()
value = int(value)
print(value + 5)
```

5. String Operations

Exercise 14: Concatenate two strings

```
str1 = "Hello"  
str2 = "World"  
print(str1 + " " + str2)
```

Exercise 15: Print the length of a string using len()

```
msg = "Python Programming"  
print(len(msg))
```

Exercise 16: Access characters from a string by index

```
print(msg[0])  
print(msg[-1])
```

Exercise 17: Convert string to uppercase and lowercase

```
print(msg.upper())  
print(msg.lower())
```

18: Replace a word in a sentence using replace()

```
sentence = "I love apples"  
print(sentence.replace("apples", "bananas"))
```

6. Boolean and Comparison

Exercise 19: Compare two numbers using ==, !=, >, <, >=, <=

```
x = 5  
y = 10  
print(x == y)  
print(x != y)  
print(x > y)
```

```
print(x < y)
print(x >= y)
print(x <= y)
```

Exercise 20: Combine two conditions using and / or print(x > 3 and y > 3)

```
print(x > 10 or y > 3)
```

Exercise 21: Use bool() to convert values to True or False

```
print(bool(0))
print(bool("Hello"))
```

7. Type Conversion

Exercise 22: Convert float to int and vice versa

```
f = 9.8
i = int(f)
print(i)
```

```
i2 = 7
f2 = float(i2)
print(f2)
```

Exercise 23: Convert string to float and int (if possible)

```
s = "12.34"
print(float(s))
print(int(float(s))) # Careful: convert to float first
```

Exercise 24: Combine different data types using str()

```
age = 25
print("I am " + str(age) + " years old")
```

