str1="Hello";

str2="World";

result=str1+" "+str2;

print(result);

repeated\_str="abc"\*4;

print (repeated\_str);

accessing\_str="Python";

first\_char=accessing\_str[0];

print(first\_char);

my\_str="Programming";

substring=my\_str[3:7];

print(substring);

length\_string="Python Programming";

total\_length=len(length\_string);

print (total\_length);

example\_string="Python Programming";

lower\_case=example\_string.lower();

print (lower\_case);

example\_string="Python Programming";

upper\_case=example\_string.upper();

print (upper\_case);

my\_string=" Hello World! ";

stripped\_string=my\_string.strip();

print(stripped\_string);

my\_string="Hello World!";

new\_string=my\_string.replace("Hello","Hi");

print(new\_string);

my\_string="Hello World!";

index=my\_string.find("World");

print(index);

my\_string="abcabcabcabc";

count=my\_string.count("a");

print(count);

my\_string="Hello, World!";

start\_with\_hello\_word=my\_string.startswith("Hello");

print(start\_with\_hello\_word);

end\_with\_world\_word=my\_string.endswith("World!");

print(end\_with\_world\_word);

my\_string="apple,orange,banana";

fruit\_list=my\_string.split(",");

print(fruit\_list);

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

joint\_string="-".join(fruits);

print(joint\_string);

### Basic Usage of Formatted string

emp\_name="Alice";

emp\_age=30;

formatted\_string\_name="My name is {} and I am {} years old.".format(emp\_name,emp\_age);

print(formatted\_string\_name);

### Positional Arguments of Formatted String

greeting\_for\_all="Hello";

emp\_name="Alice";

new\_formatted\_string="{},{}!".format(greeting\_for\_all,emp\_name);

print(new\_formatted\_string);

###Named Arguments

new\_formatted\_string="My name is {name} and I am {age} years old.".format(name="Bob",age=35);

print(new\_formatted\_string);

### Index based Formatting

new\_formatted\_string="{1} is a {0}.".format("fruit","Apple");

print(new\_formatted\_string);

###Formatting Numbers

initial\_price=49.956;

new\_formatted\_price="The price is ${:.2f}".format(initial\_price);

print(new\_formatted\_price);

###padding and Alignment

new\_formatted\_number=":10".format(42);

print(new\_formatted\_number);

### Format wirth f-string

emp\_name="Sam";

age="28";

new\_formatted\_string=f"My name is {emp\_name} and I am {age} years old."

print(new\_formatted\_string);

### Concatenation Operation

string1="Hello";

string2="World";

concatenatted\_result=string1+" "+string2;

print(concatenatted\_result);

### Membership operator in

initial\_string="Python";

contains\_py="py" in initial\_string;

print(contains\_py);

###Comparison operators

string1="Aple";

string2="banana";

is\_equal=(string1==string2);

print(is\_equal);

###Comparison operators

string1="Aple";

string2="banana";

is\_not\_equal=(string1!=string2);

print(is\_not\_equal);

###Indexing

string1="Python";

first\_character=string1[0];

print(first\_character);

###Substring

string1="Python";

substring\_character=string1[1:4];

print(substring\_character);

### Augmented Assignment Operators Pluss

string1="Hello";

string1+=" World";

print(string1);

### Augmented Assignment Operators Multi

string1="abc";

string1\*=3;

print(string1);

### Raw String(r or R)

new\_string=R"C:\new\folder"

print(new\_string);

### String Formatting

emp\_name="Alice";

emp\_age=30;

new\_formatted\_string="My Name is %s and I am %d years Old."%(emp\_name,emp\_age);

print(new\_formatted\_string);

###Addition Two Numbers

first\_num=5;

second\_num=2;

addition\_num=first\_num+second\_num;

print(addition\_num);

###Substractiotn Two Numbers

first\_num=5;

second\_num=2;

substraction\_num=first\_num-second\_num;

print(substraction\_num);

###multiplicatiotn Two Numbers

first\_num=5;

second\_num=2;

multiplication\_num=first\_num\*second\_num;

print(multiplication\_num);

###Modulus Two Numbers

first\_num=5;

second\_num=2;

modulus\_num=first\_num%second\_num;

print(modulus\_num);

###Floor Division Two Numbers

first\_num=5;

second\_num=2;

floor\_division=first\_num//second\_num;

print(floor\_division);

###Conversion to float

initial\_num=5;

convertted\_num=float(5);

print(convertted\_num);

###Conversion to complex

initial\_num=5;

convertted\_num=complex(5);

print(convertted\_num);

###Exponentiation Two Numbers

first\_num=5;

second\_num=2;

exponential\_num=first\_num\*\*second\_num;

print(exponential\_num);

### type checking

initial\_num=3.14;

print(type(initial\_num));

### Math Module

square\_root= math.sqrt(25);

print(square\_root);