

```
1 # Original string
2 name = "some name"
3
4 # Convert to upper case
5 upper_name = name.upper()
6 print(upper_name) # "SOME NAME"
7
8 # Convert to lower case
9 lower_name = name.lower()
10 print(lower_name) # "some name"
11
12 # Capitalize the first letter
13 capitalized_name = name.capitalize()
14 print(capitalized_name) # "Some name"
15
16 # Replace 'e' with 'E'
17 replaced_name = name.replace('e', 'E')
18 print(replaced_name) # "somE namE"
```

```
a = 10
```

```
b = 3
```

```
# Addition
```

```
print(a + b) # 13
```

```
# Subtraction
```

```
print(a - b) # 7
```

```
# Multiplication
```

```
print(a * b) # 30
```

```
# Division
```

```
print(a / b) # 3.3333333333333335
```

```
# Floor Division
```

```
print(a // b) # 3
```

```
# Modulus
```

```
print(a % b) # 1
```

```
# Exponentiation
```

```
print(a ** b) # 1000
```

```
1  a = 10
2
3  # Subtraction assignment
4  a -= 2
5  print(a)  # 8
6
7  # Multiplication assignment
8  a *= 3
9  print(a)  # 24
10
11 # Division assignment
12 a /= 4
13 print(a)  # 6.0
14
15 # Floor division assignment
16 a //= 2
17 print(a)  # 3.0
18
19 # Modulus assignment
20 a %= 2
21 print(a)  # 1.0
22
23 # Exponentiation assignment
24 a **= 3
25 print(a)  # 1.0
26
27 # Bitwise AND assignment
28 a = 5  # 5 in binary is 0101
29 a &= 3  # 3 in binary is 0011
30 print(a)  # 1 (binary 0001)
31
32 # Bitwise OR assignment
33 a |= 2  # 2 in binary is 0010
34 print(a)  # 3 (binary 0011)
35
36 # Bitwise XOR assignment
37 a ^= 1  # 1 in binary is 0001
38 print(a)  # 2 (binary 0010)
39
40 # Bitwise left shift assignment
41 a <=<= 1
42 print(a)  # 4 (binary 0100)
43
44 # Bitwise right shift assignment
45 a >>= 1
46 print(a)  # 2 (binary 0010)
```

```
1 # Using + operator
2 str1 = "Hello"
3 str2 = "World"
4 result = str1 + " " + str2
5 print(result) # "Hello World"
6
7 # Using join() method
8 words = ["Hello", "World"]
9 result = " ".join(words)
10 print(result) # "Hello World"
11
12 # Using formatted string literals (f-strings)
13 str1 = "Hello"
14 str2 = "World"
15 result = f"{str1} {str2}"
16 print(result) # "Hello World"
```

```
1 # Using % operator
2 name = "John"
3 age = 30
4 result = "My name is %s and I am %d years old
5 ." % (name, age)
6 print(result) # "My name is John and I am 30
7 years old."
8
9 # Using str.format() method
10 result = "My name is {} and I am {} years old
11 ." .format(name, age)
12 print(result) # "My name is John and I am 30
13 years old."
14
15 # Using formatted string literals (f-strings)
16 result = f"My name is {name} and I am {age} y
17 ears old."
18 print(result) # "My name is John and I am 30
19 years old."
```