

INPUT AND OUTPUT (I/O) OPERATIONS IN PYTHON

WRITING OUTPUT

STRING CONCATENATION

FIELDS FOR ALF'S INTRODUCTION

```
1 name = "Alf"
2 organization = "AWS Cloud Club"
3 university = "PUP Manila"
```

METHOD 1: Concatenating Strings Inside print() Function:

- Description: In Python 3, the print() function can concatenate strings separated by commas. The values are automatically separated by a space.
- Example:

```
1 print("Hi, I am", name, "☺ ~ ~ ☺ ~ ☺ and I am the official mascot of", organization,
      "of", university, "and ready to guide you from the clouds and beyond!")
```

METHOD 2: Using the + Operator:

- Description: The + operator is used to concatenate string. Note that you need to convert the non-string variable to a string using str() before concatenating it with other strings.
- Example:

```
1 alf_introduction = "Hi, I am " + name + " ☺ ~ ~ ☺ ~ ☺ and I am the official mascot of " +
  organization + " of " + university + " and ready to guide you from the clouds and beyond!"
2 print(alf_introduction)
3
4 print("Hi, I am " + name + " ☺ ~ ~ ☺ ~ ☺ and I am the official mascot of " + organization
      + " of " + university + " and ready to guide you from the clouds and beyond!")
```

METHOD 3: Using the format() method:

- Description: The format() method allows you to insert values into a string by using placeholders {}. The values are provided in the format() function in the same order as the placeholders in the string.

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- Example:

```
1 alf_introduction = "Hi, I am {} {} {} and I am the official mascot of {} of {} and ready  
to guide you from the clouds and beyond!".format(name, organization, university)  
2 print(alf_introduction)  
3  
4 print("Hi, I am {} {} {} and I am the official mascot of {} of {} and ready to guide you  
from the clouds and beyond!".format(name, organization, university))
```

METHOD 4: Using F-strings (PYTHON 3.6 and above)

- Description: F-strings (formatted string literals) were introduced in Python 3.6. They allow you to embed expressions inside string literals, using curly braces { }. The expressions inside the curly braces are evaluated and formatted into the string.
- Example:

```
1 alf_introduction = f"Hi, I am {name} {} {} and I am the official mascot of {organization} of  
{university} and ready to guide you from the clouds and beyond!"  
2 print(alf_introduction)  
3  
4 print(f"Hi, I am {name} {} {} and I am the official mascot of {organization} of {university}  
and ready to guide you from the clouds and beyond!")
```

METHOD 5: Using the join() Method

- Description: The join() method is used to concatenate a list of strings into a single string. An empty string("") is used as the separator between list elements.
- Example:

```
1 alf_introductionList = ["Hi, I am ", name, " {} {} and I am the official mascot of ", organization,  
" of ", university, " and ready to guide you from the clouds and beyond!"]  
2  
3 alf_introduction = "".join(alf_introductionList)  
4 print(alf_introduction)  
5  
6 print("".join(["Hi, I am ", name, " {} {} and I am the official mascot of ", organization, " of ",  
university, " and ready to guide you from the clouds and beyond!"]))
```

METHOD 6: Using the % Formatting

- Description: The % formatting allows you to insert values into a string using placeholders. The %s is a placeholder for a string, and %d is a placeholder for an integer. The values to be inserted are provided in a tuple following the % operator.
- Example:

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```
1 alf_introduction = "Hi, I am %s ☺ ~^ ~ ^~ ♪ and I am the official mascot of %s of %s and ready to guide  
you from the clouds and beyond!" % (name, organization, university)  
2 print(alf_introduction)  
3  
4 print("Hi, I am %s ☺ ~^ ~ ^~ ♪ and I am the official mascot of %s of %s and ready to guide you from the  
clouds and beyond!" % (name, organization, university))  
5
```

