Python Introduction

VARIABLES, INPUT AND OUTPUT

Python Introduction

Lesson objectives…

❑Understand the purpose of programming.

❑Use the print and input functions successfully.

❑Explain the purpose of a variable.

IAG LINK: Software Engineer (designs programs) **£31,496** average salary

Knowledge phase

1. Type   **`print("Hello world")`**

2. Press F5

3. Save your program in the python folder as print.

4. **Task 2:** Change the code to display your name.

5. **Task 3:** Change your code to display your favourite film **and** age.

Python Introduction

```
print("Hello year 7)

primt("How are you?")

print("Good bye"
```

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GLOSSARY KEYWORDS:

Variable: A location in a memory where data is **stored**. It **can** be changed while the program is running.

Constant: A location in a memory where data is **stored**. It **cannot** be changed while the program is running.

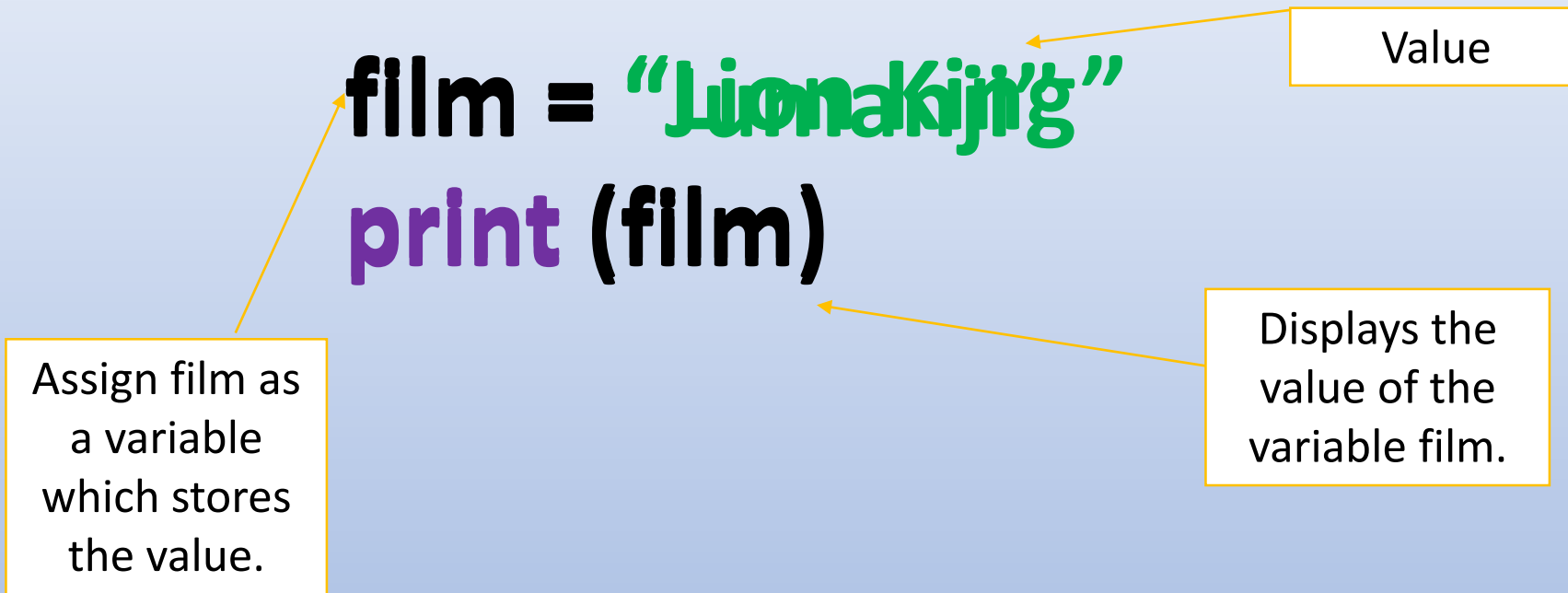**KEYWORDS:** *Variables, Constant, Python, Execute, inputs, print*

Python Introduction

Definitions:

Syntax: the order of instructions
or commands.

Assignment: Giving a variable or constant a value.

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film = "Lion King"

print (film)

Value

Displays the value of the variable film.

Assign film as a variable which stores the value.

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What will this program display?

```python
film = "Lion King"
print ("My favourite film is" , film)
```

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```
Demonstration

hobby = input("Enter a Hobby")

print (hobby)



name = input("what is your name")
print ("Oh you are", name)
```

Consolidation phase

Copy the code below, then change the variable name to car, change the question to "favourite car?", then display: car, "is a nice car"

```python
name = input("what is your name")
print ("Oh you are", name)
```

Syntax, Python, print, input, variables, constant

`Adding comments:`

- Comments are useful to help understand your code.

- They will not affect the way a program runs.

- You use **#** to comment on code.

- **Add comment to your program from previous slide.**

`Adding comments:`

`#number is a variable.`

`number = 7`

`#Displays the value of the variable.`

`print(number)`

KEYWORDS: *Syntax, Python, print, input, variables, constant*

Application phase

Complete task 1-6

Q1 helpsheet

```
print("Hello World")
print("I like cheese")
```

1. Display the following on 3 separate lines:

This is my first program.

It shows messages
Sometimes on different lines

Paste your code below:

2. Create a variable called food and store your favourite food inside the variable. Print out the value of the variable onto the screen.

Paste your code below:

Q2 helpsheet

```
food = "_____"
print(_____)
```

3) Ask the user for their favourite film. Display "I also like watching", film. **E.G:**

Paste your code below:

Enter your favourite filmFast & Furious
I also like watching Fast & Furious

Q3 helpsheet

film = _____("Enter your favourite film")
print("_____", _____)

4. Create a program that ask the user for their firstname, surname, favourite subject and age then display the above on 4 separate lines. "Remember you can't have space in a variable name.

Paste your code below:

Q4 helpsheet

```
firstname = input("Enter your firstname")
surname= _____(_____)
age = _____("_____")
subject = _____(_____)
print(_____)
print(_____)
_____(age)
_____(subject)
```

5. Create a program that ask the user for their name. Display the name 5 times on 1 line.

Paste your code below:

Q5 helpsheet

```
name = _____("Enter your name")
print(_____*5)
```

6. Create a program that ask the user for their favourite food. Display "I also like", food. Food should be replaced with the user's answer.

Q6 helpsheet

```
food = _____("_____")
print("I also like", _____)
```

Test phase

Complete the task on the next slide.

7. Ask for a user's name and age. Display "your name is", name, "and you are", age, "year old".E.G:

Paste your code below:

Enter your nameSuffar
Enter your age5
Your name is Suffar and your are 5 year old

Q7 helpsheet

```
name = _____("Enter your name")
age = _____("_____")
print("Your name is", _____, "and your age is", _____)
```