



Girls Who Code At Home

Python Poetry
Reference Guide

Python Poetry - Reference Guide



In this document you will find sample answers to some of the questions in the activity. Follow along with the activity and when you see this icon, stop and crosscheck your ideas here.

Step 1: What is Poetry?

Choose a Poem

We encourage you to choose a short poem that is meaningful to you! Below is an example of a poem by Langston Hughes called, *Dreams*.

Write your Poem Below

Hold fast to dreams
For if dreams die
Life is a broken-winged bird
That cannot fly.

Hold fast to dreams
For when dreams go
Life is a barren field
Frozen with snow.

If you are having difficulty choosing a poem, don't forget to explore some of the poems below!

- Poets.org
- PoetryFoundation.org
- ButtonPoetry.com
- FamousPoetsAndPoems.com

Step 3: Introduction to Python

Use the sample code below to reflect on how to use comments in Python.

Sample Code:

```
1. # This is a comment
2. print("Hello World.")
3. # Here we can write anything without the computer reading our messages
4. message = "hi"
```

Reflect

Take a moment to review the code snippet above. Which lines of code are comments? How do you know? Remember, you can refer to the specific lines of code by their line number.

Line #1 and #3 are comments in Python. We know that these two lines are comments because they start with the a # symbol.

Step 4: Print Statements in Python

You Try: Print your Poem

Once you choose your poem, it is time to print your poem in Python. We learned that the format and structure of poems are very important to the art. Below we shared the code for creating new lines in Python using both methods! We will continue to use our poem from above, *Dreams*.

→ Use multiple `print()` statements:

Sample Code:

```
1. print("Hold fast to dreams")
2. print("For if dreams die")
3. print("Life is a broken-winged bird")
4. print("That cannot fly.")
5. print("Hold fast to dreams")
6. print("For when dreams go")
7. print("Life is a barren field")
8. print("Frozen with snow.")
```

Step 4: Print Statements in Python (cont.)

→ Use the `\n` command:

Sample Code:

```
1. print("Hold fast to dreams\nFor if dreams die\nLife is a broken-winged bird\nthat cannot fly. Hold fast to dreams\nFor when dreams go\nLife is a barren field\nFrozen with snow.")
```

Step 5: Create a Poem Generator

Determine User Input

Use this table to help determine which words will be the variables in your poem. Here is an example of what your table would look like if you used the poem, *Dreams*.

Word #1	What prompt will your user see?
Bird	Type in an animal.
Word #2	What prompt will your user see?
Fly	Type in a verb that your animal would do.
Word #3	What prompt will your user see?
Snow	Type in something cold.

Reflect

When you run your program, what is different about the output section of Replit?

There is a flashing bar in the output window that allows you to type something in.

What is the difference between a `print()` command and an `input()` command?

A `print()` command lists a string in the output window. An `input()` command allows the user to type in feedback to the string.

Variables in Python

Use this table to create variable names for each of the words the user will replace.

Word #1	Variable Name
Bird	animal
Word #2	Variable Name
Fly	verb
Word #3	Variable Name
Ice	cold

You Try: Assign Variable Names

At this point in the program you should have three variables assigned to `input()` commands. Below we shared the code for assigning variables in Python.

Sample Code:

```
1. animal= input("Type in an animal.")
2. verb= input("Type in a verb that your animal would do.")
3. cold= input("Type in something cold.")
```

Step 6: Displaying the New Poem

You Try: Print your Customized Poem

Below we shared the code for how to complete your program. You can check out our [full sample project](#) for more ideas!

Sample Code:

```
1. animal= input("Type in an animal.")
2. verb= input("Type in a verb that your animal would do.")
3. cold= input("Type in something cold.")
4. print("Hold fast to dreams")
5. print("For if dreams die")
6. print("Life is a broken-winged " +bird)
7. print("That cannot " +verb+ ".")
8. print("Hold fast to dreams")
9. print("For when dreams go")
10. print("Life is a barren field")
11. print("Frozen with " +cold+ ".")
```

Step 7: Extensions

Extension 1: Add More Variables into your Poem (5 mins)

Check out our [full extension project](#) for more ideas!

Extension 2: Format your Poem with the Tab Command (5 mins)

Check out our [full extension project](#) for more ideas!

Extension 3: Add Wait Time to your Poem (5 mins)

Check out our [full extension project](#) for more ideas!