

Homework 1: Computer Programs

In this topic, we explore the concept of computer programs, specifically Python programs.

You will learn how to use the IDLE Python development application (or some other IDE). If you have not already set up IDLE (or another Python interpreter), [here is a link to download it](#).

Your Assignment:

1. Open the IDLE application. Open a new editor window using File->New File.
2. Type in the following program:

```
"""
File: hw1.py
Homework 1 assignemnt
YOUR NAME GOES HERE
"""

from turtle import *

def main():
    print("This program drawes a snowflake")
    color("blue")
    for i in range(10):
        forward(100)
        backward(100)
        left(360/10)
    done()

main()
```

3. Save the program using File->Save under the name **hw1.py**.
4. Run the program by first selecting Run->Module, and then switching to the Python shell window, and typing main().
5. Modify your hw1.py program so that the number of arms in the snowflake is determined by the user. You will have to add a line near the top of the program to get a value from the user:

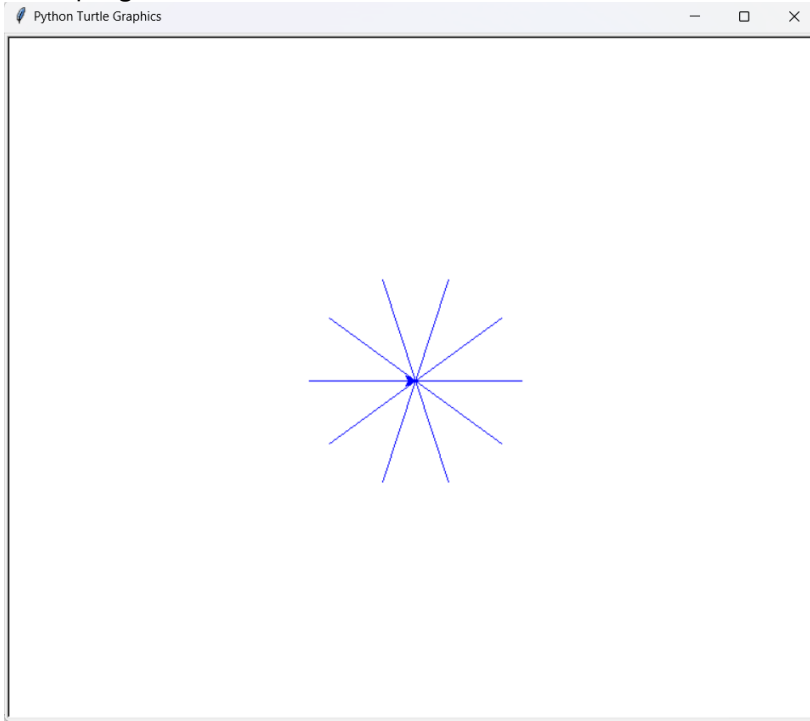
```
n = int(input("How many arms to draw? "))
```

Then you will need to change the loop to use n instead of a specific number 10.

Output 1 (before modifications)

Your program should output in the following way:

This program draws a snowflake

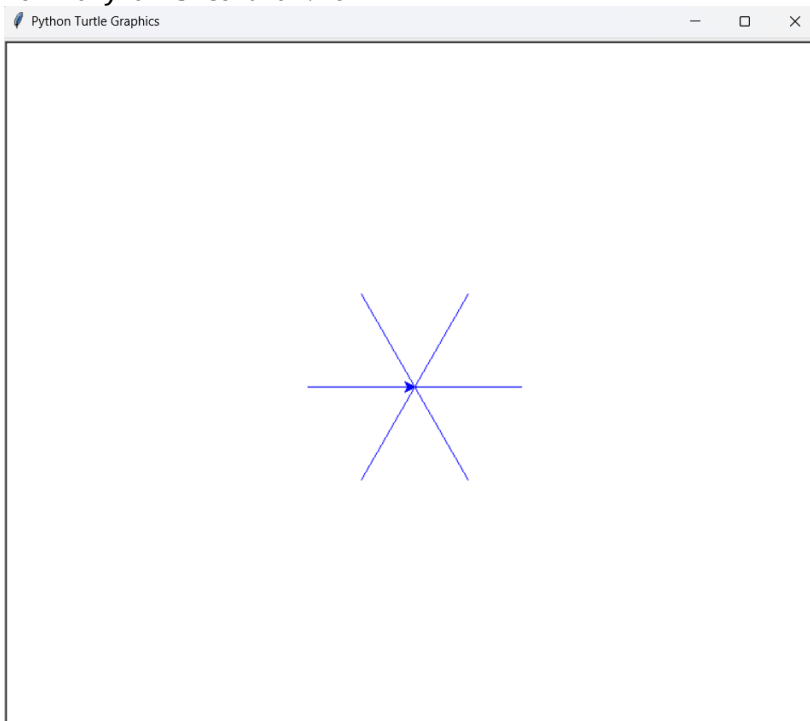


Output 2 (after modifications)

Your program should output in the following way:

This program draws a snowflake

How many arms to draw? 6



Submission

Upload the file hw1.py to **Gradescope** (not Blackboard)