

Name _____

04.04 Lists

This assignment has three parts.

Part One: Programming

Write a program to ask the user for their favorite item in a given category. Then provide feedback if their item is on your list. Use the following guidelines to write your program.

1. Pick a category and make a list of your five favorite things. Suggested categories include your favorite: actors, books, cars, or something else of your choosing.
2. Ask the user what their favorites are in your selected category.
3. By creating a list, a `loop`, and `if` statements, print a message that lets the user know if their favorites matches the ones on your list.
4. Neatly print your entire list to the screen. Be sure to number each item.
5. Write the pseudocode for this program. Be sure to include any needed input, calculations, and output.

Insert your pseudocode here:

❖ Define main

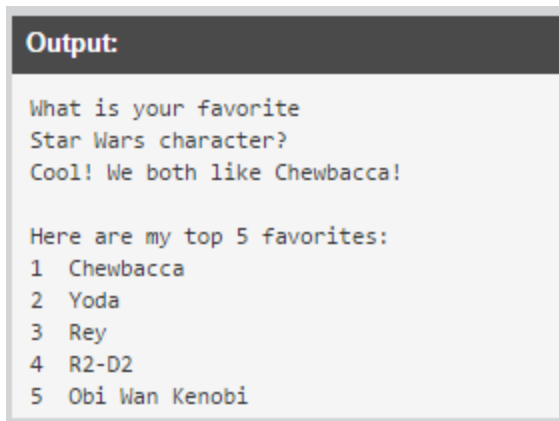
- Set the category to "Favorite Books"
- Initialize the favorite books list
- Set `use_favorite` to input "What is your favorite book? "
- Print "Category: " + category
- Print "Here are my favorite books:"
- For index and book of enumerate `favorite_books` and `start = 1`
 - Print index + ". " + book
- If `user_favorite` in `favorite_books`
 - Print "Great choice! "+`user_favorite`+" is also on my list."
 - Print "Nice choice, but '"+`user_favorite`+"' is not on my list."

Part Two: Code the program

Use the following guidelines to code your program.

1. To code the program, use the Python IDLE.
2. Using comments, type a heading that includes your name, today's date, and a short description of the program.
3. Follow the Python style conventions regarding indentation and the use of white space to improve readability.
4. Use meaningful variable names.

Example of expected output: The output for your program should resemble the following screen shot. Your specific results will vary depending on the choices you make and the input provided.



```
Output:
What is your favorite
Star Wars character?
Cool! We both like Chewbacca!

Here are my top 5 favorites:
1 Chewbacca
2 Yoda
3 Rey
4 R2-D2
5 Obi Wan Kenobi
```

Insert a copy of your code from IDLE here:

```
#Jonathan Meyer

#10/30/24

# A program to ask the user for their favorite item in a given category

def main():

    # Step 1: Define the category and list of favorite books

    category = "Favorite Books"

    favorite_books = ["1984", "To Kill a Mockingbird", "The Great Gatsby",
"Pride and Prejudice", "Moby-Dick"]

    # Step 2: Ask for user input
```

```

user_favorite = input("What is your favorite book? ")

# Step 3: Output the list of favorite books

print("Category: "+category)

print("Here are my favorite books:")

for index, book in enumerate(favorite_books, start=1):

    print(index+". "+ book)


# Step 4: Check if the user's favorite is on the list

if user_favorite in favorite_books:

    print(f"Great choice! "+user_favorite+" is also on my list.")

else:

    print(f"Nice choice, but '"+user_favorite+"' is not on my list.")

main()

```

Part Three: Post Mortem Review

Complete the Post Mortem Review (PMR). Write thoughtful two to three sentence responses to all the questions in the PMR chart.

Review Question	Response

What was the purpose of your program?	A program to ask the user for their favorite item in a given category.
How could your program be useful in the real world?	It could be used to pick out movies/books/shows based off of other movies/books/shows.
What is a problem you ran into, and how did you fix it?	Didnt run into any issues.
Describe one thing you would do differently the next time you write a program.	Use a database of favorites to expand the list.