

Assignment purpose: To compile, build, and execute an interactive application written in the C++ programming language.

Write a C++ program that collects and displays information about **you or a fictional character you invent**. You must use:

- At least **one variable** of each type `int` (age), `double` (favorite number), `char` (middle initial), and `string` (first name, last name, color, favorite food)

Customize your program with the following requirements:

- Prompt the user for:
 - Their first name (string)
 - first initial (char)
 - last name (string)
 - Age (integer)
 - Favorite color (string)
 - Favorite number with decimals (double)
 - Favorite food (string)
- After collecting the input, output a friendly summary using all variables
- Add meaningful comments in your code.

- Dealing with white space can be tricky, here are some tips:

- You can use `cin` for strings that have no white space, example:

```
cout << "What's your last name? ";  
cin.ignore(); //ignore the space from the initial return  
cin >> lName;
```

- Use `getline` for strings with white space

```
cout << "What's your favorite food? ";  
cin.ignore(); // Needed before getline if cin was used before  
getline(cin, food); // Allows spaces in input
```

```
//set the number of decimal places for doubles
```

```
cout.setf(ios::fixed);
```

```
cout.setf(ios::showpoint);
```

```
cout.precision(2); //use any number here for the number of decimal places
```

Sample Output 1:

```
Welcome to the Personal Info Collector!

What's your first name? Alex
What's your middle initial? T.
What's your last name? Anderson

Hi Alex T. Anderson! How old are you? 19
What's your favorite color? green
Nice! And what's your favorite number (decimals allowed)? 100.0
What's your favorite food? sushi and sashimi

Thanks, Alex! Here's what I learned about you:
-You're 19 years old
-Your favorite color is green
-Your favorite number is 100.00
-You love sushi and sashimi

Goodbye and have a great day!
```

Sample output 2:

```
Welcome to the Personal Info Collector!

What's your first name? Richard
What's your middle initial? L
What's your last name? Parker

Hi Richard L. Parker! How old are you? 3
What's your favorite color? orange
Nice! And what's your favorite number (decimals allowed)? 3.14
What's your favorite food? meat

Thanks, Richard! Here's what I learned about you:
-You're 3 years old
-Your favorite color is orange
-Your favorite number is 3.14
-You love meat

Goodbye and have a great day!
```

What to submit (2 files):

- Submit a screen shot that shows the code in the IDE used for this assignment. Be sure the screenshot shows the header comment with your name and date , a portion of the code and a portion of the output. See the sample screenshot provided with the assignment.
- Source code (.cpp file) – filename: lastname_A1.cpp

Additional instructions:

- Be sure to comment your code
- Include a program header COMMENT with the following information:
 - Name, date, course, and a brief description of the assignment

- Test your code in an IDE before submitting
- One source code file (unformatted text) will be submitted
- One screen shot will be submitted
- **The file name must match the assignment**
- The code must be submitted on time in order to receive credit (11:59 PM on the due date)
 - NOTE: there is a grace period until 8:00 AM the following day
- The assignment allows multiple submissions you may make revisions and resubmit until the final due date
- Late submissions will not be accepted or graded

Modifying data and submitting it as your own is a fraudulent practice—specifically, plagiarism—and is no different than copying paragraphs of information from a book or journal article and calling it your own (make sure that you work independently and submit only your own work)

This programming assignment is individual work, sharing code is considered cheating,

The use of AI to assist in this assignment is prohibited.