

CSC 1300 Program 1

Fall 2023



Due Date

Wednesday, September 20, 2023, 11:59pm

Late? You can submit up to **three days late** for **10 points per day late**.

Description

You are going to create a personality test with **TEN** questions that will test the user to see which type of donut they represent. I chose the following donut types. You are allowed to change these to six of your choice of donut type.

1. **Glazed**
2. **Peanut Butter & Jelly**
3. **Cream Filled**
4. **Glazed Twist**
5. **Blueberry Cake**
6. **Chocolate Sprinkle**

Important Rules to Remember:

- You do NOT work with a partner, friend, or classmate on this program!! This will be considered cheating and you will be charged with academic misconduct and earn a ZERO for this programming assignment. You also can't use generative AI programs such as ChatGPT, copilot, etc. Get help from TAs, tutors & me when you get stuck!!
- You are to write ten ORIGINAL questions – **do NOT copy my questions/answers**. Each question should have six possible answers (one answer to represent each donut type).
- Include comments throughout your code.
- Make your output neat & easy to read.

Specifications

1. Name your source file your username and then an underscore and then prog1.cpp. For example, Mrs. Crockett's is named acrockett_prog1.cpp.

yourusername_prog1.cpp

2. Your source file must contain a comment block at the top of your code containing the title of your program, the author of the program (you), the date you started the program, and the purpose of the program.
3. Start by printing the title of the program and explaining what the program is. Example below:

```
-----  
      WHAT TYPE OF DONUT ARE YOU?  
-----  
  
Answer the following ten questions to find  
out what donut you are.
```

4. Then, your program will ask ten questions.
 - a. Each question should have six possible answers – allowing the user to select one of them.
 - b. Make sure the user will be able to understand what he or she is supposed to do. (Make your program user-friendly). Don't make the user type in any more than necessary to get their input.
 - c. Each answer should correspond to one of the six donut types. You will have a variable that you will increment (add one to it) for each donut. For example, if answer 'a' corresponds to glazed donut, then I would add one to my glazed variable if the user selected 'a'.

5. After all questions have been answered, your program will print the results.

- a. Print the values of all six donut types
- b. Print the donut type that had the highest count. Example:

```
      RESULTS  
-----  
Glazed: 2  
Peanut Butter & Jelly: 1  
Cream Filled: 1  
Glazed Twist: 1  
Blueberry Cake: 2  
Chocolate Sprinkle: 3
```

- c. Or, if the highest count belongs to two different types, then just print "Sorry, I do not know what you are. I think you are confused."
6. Last, your program will ask the user if they want to run the program again. If they do, then you should start the test again. This means that your program will require a **loop**! To help you out with this, I have provided a sample program named **simpleLoop.cpp** in the Program 1 Assignment in ilearn for you to view.

SUBMISSION

1. Put your **username_prog1.cpp** file in a folder named **username_prog1** where "username" is your TTU username.
2. **Zip** the folder.
3. **Upload** **username_prog1.zip** folder to the Program 1 Assignment in ilearn.

GRADING

1. This assignment is 10% of your overall CSC 1300 grade.
2. The rubric on how you will be graded can be viewed in the assignment in ilearn.

SAMPLE OUTPUT

User input is highlighted in yellow.

```
-----  
WHAT TYPE OF DONUT ARE YOU?  
-----  
  
Answer the following ten questions to find  
out what donut you are.  
  
I enjoy being the center of attention.  
  a. Sometimes  
  b. Yes, most of the time  
  c. Definitely! All the time!  
  d. No, I would rather hide in a bathroom  
  e. Not usually.  
  f. I love flowers.  
  
Type a, b, c, d, e, or f and then press ENTER: e  
  
Being around other people makes me feel energized.  
  a. No, people get on my nerves!  
  b. Somewhat, but I also enjoy alone-time too.  
  c. Yes, I feel inspired and motivated when I am around others.  
  d. I really like parties!  
  e. Who cares?  
  f. It depends who the people are.  
  
Type a, b, c, d, e, or f and then press ENTER: a  
  
When working on a project, I prefer to work...  
  a. as part of a small group  
  b. by myself  
  c. with as many people as possible  
  d. not at all  
  e. with all my stuffed animals around me for support.  
  f. under my kitchen table.  
  
Type a, b, c, d, e, or f and then press ENTER: c  
  
When my boss or teacher asks to speak with me,  
I ...  
  a. assume that she or he wants to discuss a problem  
  b. think I am getting a promotion or congratulated!  
  c. ignore his or her request  
  d. think I am getting invited to a party!  
  e. run away as quickly as possible  
  f. think about puppies and kittens  
  
Type a, b, c, d, e, or f and then press ENTER: d  
  
When a boy/girl accepts my invitation to go out on  
a date, I figure it is my lucky day, and caution  
myself not to ...  
  a. get used to the feeling  
  b. wear too much cologne or perfume  
  c. eat garlic at dinner  
  d. be boring  
  e. propose marriage
```

f. be fake

Type a, b, c, d, e, or f and then press ENTER: **a**

As a leader, when my team wins an award, I usually attribute the success to...

- a. my skilled leadership
- b. my looks
- c. my teammates skills
- d. my teacher
- e. Grandpa Joe
- f. lots of chocolate and caffeine

Type a, b, c, d, e, or f and then press ENTER: **e**

When I fart in public, I...

- a. feel mortified and try to ignore it.
- b. snicker & hope no one noticed it.
- c. ask the surrounding people - did you hear THAT?!? hahaha!
- d. blame the nearest person.
- e. say "beat that!"
- f. run as far as I can.

Type a, b, c, d, e, or f and then press ENTER: **e**

When I am in the shower I...

- a. Sing as loud as I can and make soap mohawks.
- b. Hum a good tune.
- c. Efficiently wash in under 7 minutes & get out.
- d. Wash each body part 3 times exactly.
- e. lick the sides of the tub.
- f. pretend water is shooting out all my fingertips.

Type a, b, c, d, e, or f and then press ENTER: **e**

Driving to class my favorite song comes on.

I ...

- a. Dance, sing, and try to get neighboring cars to do the same.
- b. Tap my finger to the beat & sing along!
- c. Smile.
- d. Feel glad inside but still focus on driving.
- e. Yell at the next car over about how this is my favorite song.
- f. Cry.

Type a, b, c, d, e, or f and then press ENTER: **e**

When you go on vacation or holiday, what do you prefer to do?

- a. Plan every detail in advance.
- b. Plan a rough itinerary, leaving some time free.
- c. Look at a few options in advance, but only really decide when you are there.
- d. You rarely plan, just book at the last minute and go with the flow
- e. Tell everyone around me that I am on vacation
- f. Pretend to be Bob Ross

Type a, b, c, d, e, or f and then press ENTER: **a**

RESULTS

Glazed: 2
Peanut Butter & Jelly: 1
Cream Filled: 1
Glazed Twist: 1
Blueberry Cake: 2
Chocolate Sprinkle: 3

You are a CHOCOLATE SPRINKLE donut!

Do you want to run the test again? (y/n)

y

WHAT TYPE OF DONUT ARE YOU?

Answer the following ten questions to find
out what donut you are.

I enjoy being the center of attention.

- a. Sometimes
- b. Yes, most of the time
- c. Definitely! All the time!
- d. No, I would rather hide in a bathroom
- e. Not usually.
- f. I love flowers.

Type a, b, c, d, e, or f and then press ENTER: d

Being around other people makes me feel energized.

- a. No, people get on my nerves!
- b. Somewhat, but I also enjoy alone-time too.
- c. Yes, I feel inspired and motivated when I am around others.
- d. I really like parties!
- e. Who cares?
- f. It depends who the people are.

Type a, b, c, d, e, or f and then press ENTER: d

When working on a project, I prefer to work...

- a. as part of a small group
- b. by myself
- c. with as many people as possible
- d. not at all
- e. with all my stuffed animals around me for support.
- f. under my kitchen table.

Type a, b, c, d, e, or f and then press ENTER: d

When my boss or teacher asks to speak with me,

I ...

- a. assume that she or he wants to discuss a problem
- b. think I am getting a promotion or congratulated!
- c. ignore his or her request
- d. think I am getting invited to a party!
- e. run away as quickly as possible
- f. think about puppies and kittens

Type a, b, c, d, e, or f and then press ENTER: d

When a boy/girl accepts my invitation to go out on a date, I figure it is my lucky day, and caution myself not to ...

- a. get used to the feeling
- b. wear too much cologne or perfume
- c. eat garlic at dinner
- d. be boring
- e. propose marriage
- f. be fake

Type a, b, c, d, e, or f and then press ENTER: **d**

As a leader, when my team wins an award, I usually attribute the success to...

- a. my skilled leadership
- b. my looks
- c. my teammates skills
- d. my teacher
- e. Grandpa Joe
- f. lots of chocolate and caffeine

Type a, b, c, d, e, or f and then press ENTER: **d**

When I fart in public, I...

- a. feel mortified and try to ignore it.
- b. snicker & hope no one noticed it.
- c. ask the surrounding people - did you hear THAT?!? hahaha!
- d. blame the nearest person.
- e. say "beat that!"
- f. run as far as I can.

Type a, b, c, d, e, or f and then press ENTER: **d**

When I am in the shower I...

- a. Sing as loud as I can and make soap mohawks.
- b. Hum a good tune.
- c. Efficiently wash in under 7 minutes & get out.
- d. Wash each body part 3 times exactly.
- e. lick the sides of the tub.
- f. pretend water is shooting out all my fingertips.

Type a, b, c, d, e, or f and then press ENTER: **d**

Driving to class my favorite song comes on.

I ...

- a. Dance, sing, and try to get neighboring cars to do the same.
- b. Tap my finger to the beat & sing along!
- c. Smile.
- d. Feel glad inside but still focus on driving.
- e. Yell at the next car over about how this is my favorite song.
- f. Cry.

Type a, b, c, d, e, or f and then press ENTER: **d**

When you go on vacation or holiday, what do you prefer to do?

- a. Plan every detail in advance.
- b. Plan a rough itinerary, leaving some time free.
- c. Look at a few options in advance, but only really decide when you are there.
- d. You rarely plan, just book at the last minute and go with the flow
- e. Tell everyone around me that I am on vacation

f. Pretend to be Bob Ross

Type a, b, c, d, e, or f and then press ENTER: d

RESULTS

Glazed: 3
Peanut Butter & Jelly: 0
Cream Filled: 4
Glazed Twist: 1
Blueberry Cake: 1
Chocolate Sprinkle: 1

You are a CREAM FILLED donut!

Do you want to run the test again? (y/n)

n