

While loops with menus + the continue statement

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This program will print out all numbers between 1 and 10000 that are divisible by a number of the user's choice.

1. Print to screen a menu for the user to choose between 1,2,3,4, or 5.
2. Write a switch statement to check the user's input and print an appropriate message

e.g. "The following are numbers between 1 and 10,000 that are divisible by <user's chosen number>:"

Write a default component in the switch statement to catch illegal user entry values.

3. Write a component using the continue statement that will print numbers between 1 and 10000 noting which are divisible by the user's chosen number and which are not.

e.g.,

```
1 is not divisible by 3
2 is not divisible by 3
3 is divisible by 3
3 is not divisible by 3
.
.
.
```

4. Place all code inside a while loop.
5. At the bottom of the while loop, ask the user if (s)he wants to continue.

e.g., "would you like to continue (yes/no)

The user input will change the while loop's control to either false or true dictating the continuation or end of the loop.

6. Ensure that the condition to exit the while loop is that the user has chosen the "no" after being asked if (s)he would like to continue.
7. The for-loop that iterates from 1 to 10000 can be placed either at the end of the while loop or under each case statement. Experiment with both placements and choose the one you feel makes for a better design.