This assignment will involve using if statements, switch statements, and the assert function.

First, write a menu that gives two options:

1. Simple math expression evaluation.
2. Exit.

You are not permitted to use a string or if statements in this assignment. You should accomplish the relevant logic with switch & case. You will need to use a nested switch statement for option 1 and must declare relevant variables for option 1 in a block inside of the case (otherwise the compiler may give you an error).

For option 1, ask the user to enter a simple math expression. An example would be operand operator operand such as 5 + 3 or 8.2 / 5.1. You need to support addition, subtraction, multiplication, and division. You must use assert to prevent division by 0.

Your program should exactly produce the output below with the exception of the bolded line, which will be different with respect to the assertion and line number: Submit on bobby with assignment code 03.

```bash
[williams@bobby 3]$ g++ -Wall -Wpedantic -Wextra -Werror -std=c++11 a3.cpp
[williams@bobby 3]$ ./a.out
1. Simple math expression evaluation.
2. Exit.
Select an option: 8
Invalid choice!
[williams@bobby 3]$ ./a.out
1. Simple math expression evaluation.
2. Exit.
Select an option: basf
Invalid choice!
[williams@bobby 3]$ ./a.out
1. Simple math expression evaluation.
2. Exit.
Select an option: 2
Goodbye!
[williams@bobby 3]$ ./a.out
1. Simple math expression evaluation.
2. Exit.
Select an option: 1
Enter a simple math expression: 3 / 4.3
3/4.3 = 0.697674
[williams@bobby 3]$ ./a.out
```
1. Simple math expression evaluation.
2. Exit.
Select an option: 1
Enter a simple math expression: 3 / 0

```
Aborted
```
[williams@bobby 3]$ ./a.out
1. Simple math expression evaluation.
2. Exit.
Select an option: 1
Enter a simple math expression: 4 * 7
```
4*7 = 28
```
[williams@bobby 3]$ ./a.out
1. Simple math expression evaluation.
2. Exit.
Select an option: 1
Enter a simple math expression: 3 - -8
```
3--8 = 11
```
[williams@bobby 3]$