Lab 6: Odd or even

OBJECTIVE

This lab aims to make you familiar with the basic concepts of functions.

ASSIGNMENT: ODD OR EVEN

Write a program that takes a positive number from the user and identifies if it is odd or even. Your program then outputs the given number and whether the number is odd or even. (see the sample output). To complete this, you must write and use 5 functions. Function prototypes are as follows:

```
//Description   : Greeting message is output to the screen
//Pre    : None
//Post   : Greeting message is output to the screen
void greet();

//Description   : Read a user input for number and make sure it is positive
//         : if it is negative, keep asking until it is positive
//Pre    : None
//Post   : A non-negative number is returned
int readNumber();

//Description   : Identify and return the divisibility of the number
//Pre    : the parameter number must be positive
//Post   : Divisibility of the number is returned.
bool isEven(int number);

//Description   : The number and the result are output on the screen
//Pre    : None
//Post   : The number and the result are output on the screen
void printResult(int number, bool result);

//Description   : A signoff message is output on the screen
//Pre    : None
//Post   : A signoff message is output on the screen
void signoff();
```

HINTS

- Use (number) % 2 → to identify if a number is odd or even.

- Try to use the same/similar function names as suggested

FUNCTION SAMPLE

Function prototype sample:

float function_name (int var1, int var2);

Function definition sample:

float function_name (int var1, int var2)

{

body of the function;

}

Function Call sample:

function_name (var1,var2);

SAMPLE OUTPUT

Welcome to the ODD-EVEN Analyzer

Please enter a positive number: 0

Please enter a positive number: -2

Please enter a positive number: 23

You entered the number 23 and it is odd.

Have a great day!

THINGS TO CONSIDER TO EARN FULL GRADE

Your program will be graded on:

- Write and use functions. No functions, no points.
- Write function prototypes before the main function.
- Use return even in void functions.
- **Use sample output structure.**
- Readability of the program, using comment header.
- Correctness of the program.
- Following programming conventions: variable→ camelCase; constant → UPPERCASE

SUBMIT YOUR WORK

- To submit your work: **cssubmit 1580 f 6** (4:00 p.m. to 5:50 p.m.)
  cssubmit 1580 g 6 (6:00 p.m. to 7:50 p.m.)