

## CSc 3320: Systems Programming

Spring 2021

Homework

# 4: Total points 100

### Submission instructions:

1. Create a Google doc for each homework assignment submission.
2. Start your responses from page 2 of the document and copy these instructions on page 1.
3. Fill in your name, campus ID and panther # in the fields provided. If this information is missing in your document TWO POINTS WILL BE DEDUCTED per submission.
4. Keep this page 1 intact on all your submissions. If this *submissions instructions* page is missing in your submission TWO POINTS WILL BE DEDUCTED per submission.
5. Each homework will typically have 2-3 PARTS, where each PART focuses on specific topic(s).
6. Start your responses to each PART on a new page.
7. If you are being asked to write code copy the code into a separate txt file and submit that as well.
8. If you are being asked to test code or run specific commands or scripts, provide the evidence of your outputs through a screenshot and copy the same into the document.
9. Upon completion, download a .PDF version of the document and submit the same.

Full Name: Alexandra Gentile

Campus ID: agentile2

Panther #: 002413770

```

collect2: error: ld returned 1 exit status
[[agentile2@gsuad.gsu.edu@snowball ~]$ vi checkPassword.c
[[agentile2@gsuad.gsu.edu@snowball ~]$ cc checkPassword.c
[[agentile2@gsuad.gsu.edu@snowball ~]$ ./a.out
Please enter your password: panthers
your password is safe[[agentile2@gsuad.gsu.edu@snowball ~]$ ./a.out
Please enter your password: qwe
deduction: 35
your password is unsafe, reset![[agentile2@gsuad.gsu.edu@snowball ~]$ ./a.out
Please enter your password: panthers
your password is safe[[agentile2@gsuad.gsu.edu@snowball ~]$ ./a.out
Please enter your password: 123
deduction: 35
your password is unsafe, reset![[agentile2@gsuad.gsu.edu@snowball ~]$ ./a.out
Please enter your password: 1
deduction: 45
1. your password is unsafe, reset![[agentile2@gsuad.gsu.edu@snowball ~]$ █

```

```

alexisgentile — agentile2@gsuad.gsu.edu@snowball:~ — ssh agentile2@...
#include <stdio.h>
#include <string.h>

int main() {
    //declaring variables
    char ch[10]; //initilazing password string length of 10
    int length;
    int points;
    int newLength;

    //user inputs password
    printf("Please enter your password: ");
    scanf("%s", ch);
    length = strlen(ch); // initilizes string length of entered password as length variable

    //check entered password length
    if(length != 10) { // if length does not equal 10 characters then
        newLength = 10 - length; //declares new length as the missing number of characters
        points = 5 * newLength; // declares points as 5 times the new length

        if(points > 30) { // if points is greater than 30 then print
            printf("deduction: %d \nyour password is unsafe, reset!", points);
        }
        else { // else if points is less than 30
            printf("your password is safe");
        }
        // else if length equals 10
        else {
            printf("your password is safe");
        }
        return 0;
    }
}

```

2.

```
your password is safe[agentile2@gsuad.gsu.edu@snowball ~]$ ./a.out
Please enter your password: panthers1
deduction: 40
your password is unsafe, reset![agentile2@gsuad.gsu.edu@snowball ~]$ ./a
.out
Please enter your password: Panthers1
[agentile2@gsuad.gsu.edu@snowball ~]$
```

```
alexisgentile — agentile2@gsuad.gsu.edu@snowball:~ — ssh agentile2@...  
[[agentile2@gsuad.gsu.edu@snowball ~]$ ./a.out  
[enter a word: madam  
[madam is not palindrone  
[[agentile2@gsuad.gsu.edu@snowball ~]$ vi isPalindrone.c  
[[agentile2@gsuad.gsu.edu@snowball ~]$ cc isPalindrone.c  
[[agentile2@gsuad.gsu.edu@snowball ~]$ ./a.out  
[enter a word: madam  
[madam is not palindrone  
[[agentile2@gsuad.gsu.edu@snowball ~]$ vi isPalindrone.c  
[[agentile2@gsuad.gsu.edu@snowball ~]$ cc isPalindrone.c  
[[agentile2@gsuad.gsu.edu@snowball ~]$ ./a.out  
[enter a word: madam  
[madam is palindrone  
[[agentile2@gsuad.gsu.edu@snowball ~]$ ./a.out  
[enter a word: man  
[man is not palindrone  
[[agentile2@gsuad.gsu.edu@snowball ~]$ ./a.out  
[enter a word: racecar  
[racecar is palindrone  
[[agentile2@gsuad.gsu.edu@snowball ~]$ ./a.out  
[enter a word: wow  
[wow is palindrone  
[[agentile2@gsuad.gsu.edu@snowball ~]$ ./a.out  
[enter a word: word  
[word is not palindrone  
[[agentile2@gsuad.gsu.edu@snowball ~]$ ]
```

3.

## 5.

```
[[agentile2@gsuad.gsu.edu@snowball ~]$ gcc -Wall -std=c99 -g countryCodes.c
[[agentile2@gsuad.gsu.edu@snowball ~]$ ./a.out
[enter the country code: 24
[Country not found[agentile2@gsuad.gsu.edu@snowball ~]$ ./a.out
[enter the country code: 34
[Country: Spain[agentile2@gsuad.gsu.edu@snowball ~]$ vi countryCodes.c
[[agentile2@gsuad.gsu.edu@snowball ~]$ ./a.out
[enter the country code: 34
[Country: Spain[agentile2@gsuad.gsu.edu@snowball ~]$ gcc -Wall -std=c99 -g countryCodes.c
[[agentile2@gsuad.gsu.edu@snowball ~]$ ./a.out
[enter the country code: 34
Country: Spain
[[agentile2@gsuad.gsu.edu@snowball ~]$ ./a.out
[enter the country code: 1
Country: United States
[[agentile2@gsuad.gsu.edu@snowball ~]$ ./a.out
[enter the country code: 63
Country: Philippines
[[agentile2@gsuad.gsu.edu@snowball ~]$
```