

Kartik Srivastava
Student ID – 3668516
Assignment 3 Report

1. My program consists of 4 functions, including the main(). The functions besides main are display(), finding(), and checking(). The program has more function to simplify and allow easier readability. The 2D char tags[][] array is used to store the tags and the int array[] is used to keep track and store the number of times a tag is found in the html file.

htags.c

```
#include <stdlib.h>
#include <stdio.h>
#include <string.h>

char tags[100][10];
static int array[100];
char storing[100000];
char tempArr[100][10];

int counter = 0;
int variable = 0;
int anotherVar = 0;

void display()
{
    for(int i = 0; i < counter; i++)
    {
        printf("%s found: %d\n", *(tags+i), array[i]);
    }
}

int checking(char* var)
{
    if((*var) == '\\0')
    {
        return -5;
    }

    if(counter == 0)
    {
        return -1;
    }
}
```

```

else
{
    for(int i = 0; i < counter; i++)
    {
        int result = strcmp(*(tags+i), var);

        if(result == 0)
        {
            return i;
        }
    }
    return -1;
}
}

void finding(char* charac)
{
    int a = 0;
    int len = strlen(charac);

    for(int i = 0; i < len; i++)
    {
        if(charac[i] == '<')
        {
            for(int j = i+1; j < len; j++)
            {
                if(charac[j] == '>' || charac[j] == ' ' || charac[j] == '/' || charac[j] == '\n')
                {
                    i = j;
                    break;
                }

                else
                {
                    tempArr[anotherVar][a] = charac[j];
                    a++;
                }
            }

            char* var1 = &tempArr[anotherVar][0];
            int ans = checking(var1);

            if(ans == -1)

```

```

        {
            for(int k = 0; k < strlen(var1); k++)
            {
                tags[variable][k] = tempArr[anotherVar][k];
            }
            array[variable] = array[variable] + 1;
            variable++;
            counter++;
        }

        else
        {
            array[ans] = array[ans] + 1;
        }
        anotherVar++;
        a = 0;
    }
}

int main(int argc, char ** argv)
{
    char* inputttt = &storing[0];
    scanf("%[^\\t]*c", inputttt);
    finding(inputttt);
    display();
}

```

```

C:\Users\srvk\OneDrive\Desktop\UNB\Summer2020\CS2263\Assignments\Assignment3\A3Data>gcc htags.c

C:\Users\srvk\OneDrive\Desktop\UNB\Summer2020\CS2263\Assignments\Assignment3\A3Data>a.exe < HelloWorld.html
!DOCTYPE found: 1
html found: 1
!-- found: 1

```

```

C:\Users\srvk\OneDrive\Desktop\UNB\Summer2020\CS2263\Assignments\Assignment3\A3Data>gcc htags.c

C:\Users\srvk\OneDrive\Desktop\UNB\Summer2020\CS2263\Assignments\Assignment3\A3Data>a.exe < Sample.html
!DOCTYPE found: 1
html found: 1
!-- found: 1

```