CIS*1500 - Assignment Two

#1

```
const int MAX_LEN = 6;

int sum = 0;

int num [MAX_LEN] = {8,1,3, 6, 2, 10};


   for(int i = 0 ; i < MAX_LEN; i++)

     {

       if ((num[i] % 2) == 0)

         {
           sum = sum + num[i];
         }


     }

       printf("%d", sum);
```

****

#2

strlen() returns a integer length of a string not including the null terminator e.g strlen (“dog”) returns 3. **Library –> <string.h>**

strcat() copies a string (e.g sourceString) to end of another string variable (e.g mainString) starting at the null terminator. Ex, strcat(“hello”, “!”) returns hello! **Library –> <string.h>**

sprintf() is used to store data as a string. It’s also used to create string as output using ‘formatted data’. Ex, format –-> int sprintf(char *string, const char, *form…)

- *string represents name of some array that will store output of the formatted data.
- *form parameter shows the format of the output ex, %d, %lf, %c.
- Ex, sprintf(stringArray, “ The total ice-creams I ate were %d,” numCreams) prints “the total ice-creams I ate were 3. **Library –> <stdio.h>**

strcpy() copies a string (e.g sourceString) to e.g (destString) up to and including null character. Ex, (destString, “Martina”) –-> char destString [7] = {‘M’, ‘a’, ‘r’, ‘t’,’i’,’n’,’a’}. **Library –> <string.h>**

isalpha() returns true if element in text is alphabetical. Ex, isalpha(‘a’) returns true. **Library –> <ctype.h>**

isupper() returns true if characters in text is uppercase A to Z. Ex, isupper(‘B’) returns true . **Library –> <ctype.h>**

ispunct() returns true if the element in text is a punctuation character including, !&$. Ex, ispunct(‘!’) returns true, ispunct(‘2’) returns false. **Library –> <ctype.h>**

atoi() converts a string to an int value. Ex, atoi(“234”) returns 234 as an int type on which you can do arithmetic operations/calculations. **Library –> <stdlib.h>**

atol() returns a long int of a string where the function skips all white spaces at the beginning of the string then converts the characters into a num type , then stops when it encounters the first ‘characters’ that aren’t characters. Ex, val = atol(“9893933929”) returns –-> long value = 9893933929. **Library –> <stdlib.h>**

strcmp() allows two strings to be compared and if both strings are equal the function returns 0 and if not equal returns a non-zero. Ex, if(strcmp(“Martina”, “John”) == 0)

{

(Not Equal)

}

Library –> <string.h>

****

#3

```
const int MAX_LEN = 5;
char word [] = {'M','O','M', 'M', 'Y'};
      int findM( char word [], const int MAX_LEN)
        {
          for(int i = 0 ; i < MAX_LEN; i++)
            {
              if(word[i] == 'M')
               {
                 return i;
                 break;
```

```
        }


    }

        return -1;
}
```