Homework Assignment 11

Q1. State True/False :

i. The sequence 'abcd' signifies a pointer that contains the address of 'a'

ii. The empty string " " uses no memory

iii. `stg` in the declaration `char stg[3] = "Yes";` is not a string

iv. A string s1 cannot be copied to the string s2 using s1 = s2

v. If a character array is not initialized on declaration, each element must be assigned individually.

Q2. Fill in the blanks.

i. A function looks for ------ character to determine the end of the string

ii. The ------ function must be used before it can overflow the buffer

iii. The ----- function reads data from the string and ------ writes data to the string

iv. The file ----- is used to handle string handling functions of the standard library

v. The function call `strcmp("somalia","somalis");` returns --------

Q3. Short answer questions.

i. If a program crashes when printf is used with %s, what could be the reason?

ii. Rewrite the following code to compile and execute correctly.

```
#include <stdio.h>
#include <strings.h>
int main(void)
{
    char stg[50];
    stg = "ice cream sandwich ";
    printf("%s\n",toupper(stg));
    return 0;
}
```

Q4. Programming :

i. If the character array `stg` is set "   ITP 2020   " in a program, reassign `stg` after removing all leading and trailing whitespace from the string.

ii. Write a program that accepts an integer between 1 and 12 from keyboard and prints the first three letters of the corresponding month. For instance, keying in 3 should print Mar. All month names should be extracted from single string without using if or switch statement.