COEN 11- Practice II

Solutions on Wednesday

1. What is printed?

```
char str[10] = "abcd";
char *p;

p = str;
*p = 'd';
*(p + 1) = 'e';
p++;
*p = 'f';
p += 5;
*p = 'g';
str[2] = *p;

printf ("%s\n", str);
printf (%c\n", *p);
```

2. Write a function to initialize an NxN 2D int array with a checkers-board pattern. Assume the array mat is global and the size N is constant. The prototype of the function is: void init ( );

3. Write a function to determine and return the size of a string. The prototype of the function is: int str_size (char *string);

4. Write a function to merge two strings. The function will receive 3 strings (str1, str2, and str3) as arguments and will copy the characters from str2 and str3 into str1 so that the characters from str2 and str3 alternate. str1 should have an equal number of characters from str2 and str3. You may assume that there is enough space in the area pointed by str1. The prototype of the function is: void merge (char *str1, char *str2, char *str3);

5. Write a printf statement to output the value of each member of each struct nonsense in array useless. Use loops when necessary.

```
struct nonsense
{
        char *string;
        int nonsense_array[10];
};

struct nonsense useless[10];
```