

Name (PRINTED): _____

Student ID #: _____

Section # (or TA's: _____
name and time)

CMSC 106

Quiz #9

Fall 2007

1. [16 pts. total] Given the above code, give the output of the program if we replace <some code> with one of the following: (if you think that the code has an error, write "error"). Each is independent - assume the results of one does not affect the results of the next question.

```
#include <stdio.h>
#include<string.h>
int main(){
    char a[10]="abc";
    char *b;
    char c[50]="The cat with the hat";
    <some code>
    return 0;
}
```

- a. [4 pts.] `strncpy(a,"Jan",10);`
 `printf("%s",a);` Jan
- b. [4 pts.] `b = strchr(c,'a');`
 `printf("%s %s",a,b);` abc t with the hat
- c. [4 pts.] `strncat(c," is back.",25);`
 `printf("%s",c);` The cat with the hat is back
- d. [4 pts.] `c[7]='\0';`
 `strncat(c," is black.",25);`
 `printf("%s",c);` The cat is black

2. [14 pts] Write the complete function that takes in two strings (arrays of characters where you are sure the used portion terminates in a null character) as the only parameters and returns 0 for false or 1 for true which tells if all of the characters in the second string are present in the first. (Note: you can't assume they will be present in that order, so you can't use the strstr function.) (Also note: You do not need to be concerned with the number of times it appears in either string - just if it is present or not.)

For example: if the first string is "Jandelyn" and the second string is "land" - the function should return true since all of those characters are indeed present.

Another example: if the first string is "Jandelyn" and the second string is "deed" - the function should return true since all of those characters are indeed present (not we are ignoring the quantity).

One last example: if the first string is "Jandelyn" and the second string is "dear" - the function should return false since at least one of the characters is not present.

```
int contains(char full[], char list[]){
    int listind = 0;
    while(list[listind] != '\0'){
        if(strchr(full, list[listind]) == NULL){
            return 0;
        } else{
            listind++;
        }
    }
    return 1;
}
```