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Section 07

Problem 1.

Code:

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


void strip(char *s) {
   static int i = 0, k = 0, check = 0;
   if (!s[i]) {
      return;
   } else {
      s[i] = s[i + k];

      if(s[i]<'A'&&s[i]>'z')
        {
           k++;
           i--;
        }
        i++;
        strip(s);
     }
   }

   void reverse(char *c, int start, int end) {
      char chr;
      if (start >= end)
         return;

      chr = *(c + start);
      *(c + start) = *(c + end);
      *(c + end) = chr;
      reverse(c, ++start, --end);
   }

   int main() {
      char s[1000];
      char stripped[1000];
      char str[1000];
      char reversed[1000];
      char rev[1000];
      int result;
```

```c
    printf("Enter  the string: ");
    gets(s);
    printf("You entered '%s'\n", s);
    strip(s);
    strlwr(s);
    strcpy(stripped, s);
    strcpy(str, s);
    reverse(stripped, 0, strlen(stripped) - 1);
    strcpy(reversed, stripped);
    strcpy(rev, stripped);




    result = strcmp(str, rev);
    if (result == 0) {
        printf("This is a palindrome!");
    } else {
        printf("This is not a palindrome :(");
    }

    return 0;
}
```

Output:

```
C:\Users\AmaanAsim\CLionProjects\untitled\cmake-build-debug\untitled.exe
Enter  the string:Drab as a fool, aloof as a bard.
 You entered 'Drab as a fool, aloof as a bard.'
This is a palindrome!
Process finished with exit code 0


C:\Users\AmaanAsim\CLionProjects\untitled\cmake-build-debug\untitled.exe
Enter  the string:It ain't over till it's over
 You entered 'It ain't over till it's over'
This is not a palindrome :(
Process finished with exit code 0
```

```
C:\Users\AmaanAsim\CLionProjects\untitled\cmake-build-debug\untitled.exe
Enter  the string:radar
 You entered 'radar'
This is a palindrome!
Process finished with exit code 0


C:\Users\AmaanAsim\CLionProjects\untitled\cmake-build-debug\untitled.exe
Enter  the string:When you come to a fork in the road, take it
 You entered 'When you come to a fork in the road, take it'
This is not a palindrome :(
Process finished with exit code 0

C:\Users\AmaanAsim\CLionProjects\untitled\cmake-build-debug\untitled.exe
Enter  the string:Marge lets Norah see Sharon's telegram.
 You entered 'Marge lets Norah see Sharon's telegram.'
This is a palindrome!
Process finished with exit code 0
```