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28 April Lab questions

#1. Replacing occurrences of a specific letter with another new letter

Code:

```c
#include <stdio.h>
#include <string.h>
int main()
{
    int i_285,flag_285=0;
    char A_285[50],och_285,nch_285;
    printf("Please provide a short sentence\n");
    gets(A_285);
    printf("give old character\n");
    scanf("%c", &och_285);
    printf("give new character\n");
    scanf(" %c", &nch_285);
    printf("Your sentence before replacing is=\n");
    puts(A_285);
    for(i_285=0; A_285[i_285]!='\0' ;i_285++)
    {
        if(A_285[i_285]==och_285)
        {
            A_285[i_285]=nch_285;
            flag_285=1;
        }
    }
    if(flag_285==1)
    {
        printf("Your sentence after replacing is=\n");
        puts(A_285);
    }
    else
        printf("%c is not in your sentence\n",och_285);

}
```

Output:

```
PROBLEMS  OUTPUT  TERMINAL
TERMINAL
PS C:\Users\KIIT\Desktop\Programming\28_april strings> gcc strings2.c
PS C:\Users\KIIT\Desktop\Programming\28_april strings> ./a.exe
Please provide a short sentence
This is amazing
give old character
a
give new character
A
Your sentence before replacing is=
This is amazing
Your sentence after replacing is=
This is AmAzing
PS C:\Users\KIIT\Desktop\Programming\28_april strings>
```

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```
PS C:\Users\KIIT\Desktop\Programming\28_april strings> ./a.exe
Please provide a short sentence
This is amazing
give old character
p
give new character
A
Your sentence before replacing is=
This is amazing
p is not in your sentence
PS C:\Users\KIIT\Desktop\Programming\28_april strings>
```

#2. 2D array of strings
Code:

```c
#include <stdio.h>
#include <string.h>
int main()
{
    char A_285[3][10];
    int i_285,j_285;
    printf("Please give 3 words\n");
    for(i_285=0;i_285<3;i_285++)
    {
        gets(A_285[i_285]);
    }
    printf("Your words are as follows\n");
    for(i_285=0;i_285<3;i_285++)
    {
            printf(" %s ",A_285[i_285]);
            printf("\n");
    }
}
```

Output:

```
PS C:\Users\KIIT\Desktop\Programming\28_april strings> gcc 2D_strings.c
PS C:\Users\KIIT\Desktop\Programming\28_april strings> ./a.exe
Please give 3 words
kidus
Is A
Genius
Your words are as follows
 kidus
 Is A
 Genius
PS C:\Users\KIIT\Desktop\Programming\28_april strings>
```

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```
PS C:\Users\KIIT\Desktop\Programming\28_april strings> gcc 2D_strings.c
PS C:\Users\KIIT\Desktop\Programming\28_april strings> ./a.exe
Please give 3 words
It
is
great
Your words are as follows
 It
 is
 great
PS C:\Users\KIIT\Desktop\Programming\28_april strings>
```

#3. Counting the vowels of words

Code:

```
#include <stdio.h>
#include <string.h>
int main()
{
    char A_285[3][10];
    int i,j,count_285;
    printf("Please give 3 words\n");
    for(i=0;i<3;i++)
    {
        gets(A_285[i]);
    }
    for(i=0;i<3;i++)
    {
        for(j=0;j<9;j++)
        {
            if(A_285[i][j]== 'a' || A_285[i][j]=='e' || A_285[i][j]== 'i' || A_285[i][j]== 'o'
|| A_285[i][j]== 'u' || A_285[i][j]== 'A' || A_285[i][j]=='E' || A_285[i][j]== 'I' ||
A_285[i][j]== 'O' || A_285[i][j]== 'U' )
            {
                count_285++;
            }
        }
    }
    printf("The number of your vowels is %d=>",count_285);
}
```

Output:

```
PS C:\Users\KIIT\Desktop\Programming\28_april strings> gcc vowels.c
PS C:\Users\KIIT\Desktop\Programming\28_april strings> ./a.exe
Please give 3 words
Myoming
is in
USA
The number of your vowels is 6=>
PS C:\Users\KIIT\Desktop\Programming\28_april strings>
```

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```
PS C:\Users\KIIT\Desktop\Programming\28_april strings> ./a.exe
Please give 3 words
ttiaouett
YYioaueYY
ggIOUEAgg
The number of your vowels is 15=>
PS C:\Users\KIIT\Desktop\Programming\28_april strings>
```

#4. Checking if a word is palindrome or not
Code:

```c
#include<stdio.h>
#include<string.h>
int main()
{
    int i_285,j_285,length_285,temp_285,count_285,huh;
    char A_285[30],P_285[30];
    printf("Give a sentence\n");
    gets(A_285);
    length_285=strlen(A_285);
    temp_285 = 0;
    for(i_285=length_285-1;i_285>=0;i_285--)
    {
        P_285[temp_285]=A_285[i_285];
        temp_285++;
    }

    for(i_285=0;i_285<length_285-1;i_285++)
    {
        if(P_285[i_285]==A_285[i_285])
        {
            count_285++;
        }
        else
            break;
    }
    if(count_285==length_285-1)
        printf("Yes it is palindrome");
    else
        printf("Not a palindrome\n");
    return 0;
}
```

Output:

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```
TERMINAL
PS C:\Users\KIIT\Desktop\Programming\28_april strings> gcc palindrome.c
PS C:\Users\KIIT\Desktop\Programming\28_april strings> ./a.exe
Give a sentence
MADAM
Yes it is palindrome
PS C:\Users\KIIT\Desktop\Programming\28_april strings>
```

```
PS C:\Users\KIIT\Desktop\Programming\28_april strings> ./a.exe
Give a sentence
kjgfa
Not a palindrome
PS C:\Users\KIIT\Desktop\Programming\28_april strings>
```