Q.1 Write a Program to check whether a string is a palindrome or not without using string functions.

For example,
Input:
Enter any string: nayan

Output:
Given string is a Palindrome.

For example,
Input:
Enter any string: hello

Output:
Given string is not a Palindrome

Ans:

```
#include <stdio.h>
int Palindrome(char str[]) {
   int length = 0;

   while (str[length] != '\0') {
      length++;
   }


   for (int i = 0; i < length/2; i++) {
      if (str[i] != str[length - i - 1]) {
         return 0;
      }
   }
   return 1;
}

int main() {
   char str[100];
   printf("Enter any string: ");
   scanf("%s", str);

   if (Palindrome(str)) {
      printf("Given string is a Palindrome.\n");
```

```
    } else {
        printf("Given string is not a Palindrome.\n");
    }

    return 0;
}
```

o/p:

```
Enter any string: nayan
Given string is a Palindrome.


=== Code Execution Successful ===
```

Q.2 Write a Program to count the frequency of each character in a given string.

For example,

Input:

```
Enter any string: development
```

Output:

```
Frequency of each letter:
d => 1
e => 2
v => 1
l => 1
o => 1
p => 1
m => 1
n => 1
t => 1
```

Ans:

```
#include <stdio.h>


int main() {
 char str[500] ;
 printf("entr any string:");
 scanf("%s",str);
 char value;

 for(int i=0;str[i]!='\0';i++){
     value=str[i];
     int n=0;
```

```
    for(int j=0;str[j] !='\0';j++){
        if(value==str[j]){
        n++;
    }
 }
 printf("\n%c=> %d",value,n);
 }

return 0;
}
```

o/p:

```
entr any string:development

d=> 1
e=> 3
v=> 1
e=> 3
l=> 1
o=> 1
p=> 1
m=> 1
e=> 3
n=> 1
t=> 1

=== Code Execution Successful ===
```