

## Assignment 18

① ~~void~~ <sup>int</sup> calculatelength(char str[])  
{  
    int i;  
    for(i=0; str[i]; i++);  
    return i;  
}

② void reverseString(char s[], int length)  
{  
    int i, n, temp, d, k=0;  
    n=length-1;  
    for(i=0; i<=length/2; i++)  
    {  
        d=n-k;  
        if(d<i)  
            break;  
        if(s[i]!=' ')  
            continue;  
        if(s[d]!=' ')  
        {  
            temp=s[i];  
            s[i]=s[d];  
            s[d]=temp;  
            k++;  
            d=n-k;  
        }  
        if(d<i)  
            break;  
        temp=s[i];  
        s[i]=s[d];  
        s[d]=temp;  
        k++;  
    }  
}



④

```
void upperCase (char str[])
```

```
{
```

```
    int i;
```

```
    for (i=0; str[i]; i++)
```

```
    {
```

```
        if (str[i] >= 'a' && str[i] <= 'z')
```

```
            str[i] = str[i] - 32;
```

```
    }
```

```
    printf("%s", str);
```

```
}
```

⑤

```
void lowerCase (char str[])
```

```
{
```

```
    int i;
```

```
    for (i=0; str[i]; i++)
```

```
    {
```

```
        if (str[i] >= 'A' && str[i] <= 'Z')
```

```
            str[i] = str[i] + 32;
```

```
    }
```

```
    printf("%s", str);
```

```
}
```



```

(6) void alphaNumeric( char str[])
{
    int i, count = 0;
    for( i = 0; str[i]; i++)
    {
        if( str[i] >= 'a' && str[i] <= 'z' || str[i] >= 'A' && str[i] <= 'Z' ||
            str[i] >= '0' && str[i] <= '9' )
            count++;
    }

    if( count > 1 )
        printf( "String is alphanumeric\n" );
    else
        printf( "String is not alphanumeric\n" );
}

```

```

(7) void checkPalindrome( char s[], int length )
{
    char b[length];
    int i, j = 0, count = 0;
    for( i = length - 1; i >= 0; i--, j++)
        char b[j] = char s[i];

    for( i = 0; str[i]; i++)
    {
        if( s[i] != b[i] )
            count++;
        break;
    }

    if( count == 1 )
        printf( "String is not palindrome\n" );
    else
        printf( "String is palindrome\n" );
}

```



⑧ int countWords (char str[])

```
{
    int count = 0, i;
    for (i = 0; str[i]; i++)
```

```
{
    if (str[i] == ' ')
        count++;
}
```

```
return (count + 1);
}
```

⑨ void ReverseWordWise (char str[])

```
{
    int count = 0, i, length, k = 0, j = 0;
    for (i = 0; str[i]; i++)
```

```
{
    if (str[i] == ' ')
        count++;
}
```

```
for (i = 0; str[i]; i++)
    length = i;
char s[length];
int a[count + 1];
```

```
for (i = 1; i <= count; i++)
```

```
{
    for (j = 0; str[j]; j++)
```



```
if (str[j] == ' '){
    a[i] = j;
    break;
}
```

```
j++;
```

```
}
```

```
a[0] = -1;
```

```
for (j = count; j >= 0; j--){
```

```
for (i = a[j] + 1; str[i] || i <= a[j+1]; i++)
```

```
    s[k] = str[i];
    k++;
```

```
    i++;
```

```
}
```

```
for (i = 0; s[i]; i++)
    str[i] = s[i];
```

```
printf("String Reversed According to Word wise\n");
printf("%s", s);
```

```
}
```



```

(3) #include <stdio.h>
int main()
{
    int i;
    char str1[100], str2[100];
    printf("Enter 2 strings\n");
    fgets(str1, 100, stdin);
    fgets(str2, 100, stdin);
    printf("%s\n", str1);
    printf("%s\n", str2);

    for(i=0; str[i] && str2[i]; i++)
    {
        if(str1[i] < str2[i])
        {
            printf("String is in Alphabetical Order");
            break;
        }
        if(str1[i] > str2[i])
        {
            printf("String is in Alphabetical Order");
            break;
        }
        if(str1[i] == 0 && str2[i] == 0)
        {
            printf("String is same");
            return 0;
        }
    }
}

```