Assignment -8

(1). #include <stdio.h>
main()
{
    char word1 [40], word2 [40], word3 [40],
    word 4 [40];
    printf ("enter text : \n");
    scanf (" %s %s", word1, word2);
    scanf (" %s", word3);
    scanf (" %s", word 4);
    printf ("\n");
    printf (' word1 = %s\n word 2 = %s \n",
        word1, word2);
    printf (' word 3= %s \n word 4 = %s\n",
        word3, word 4);
}

output :
    Enter text :
Oxford Road , London M17 6D.
word1 = Oxford.
word 2 = Road.
word 3 = London.
word 4 = M17 6D.
Enter text :
Oxford -Road, london - M17 6D united kms
word1 = Oxford-Road.
word 2 = London - M17 6D.
word 3 = United
word 4 = Kingdom.

```c
(2)  #include <stdio.h>
     int main()
     {
         char str[26];
         fgets(str, 30, stdin);
         puts(str);
         FILE *f = fopen("file.txt", "r");
         if (f == NULL)
         {
             perror("error opening file");
             return (-1);
         }
         else {
             fgets(str, 30, f);
             puts(str);
         }
         fclose(f);
         return (0);
     }
```

(3)

```c
#include <stdio.h>
#include <string.h>
int main()
{
    char s[100];
    int i;
    printf("\n Enter a string:");
    gets(s);
    for(i=0; s[i] != '\0'; i++)
    {
        if(s[i] >= 'a' && s[i] <= 'z')
        {
            s[i] = s[i] - 32;
        }
    }
    printf("\n String in upper case= %s",s);
    return 0;
}
```

output:
Enter a string : hello world !
string in uppen case : HELLO WORL

```c
#include <stdio.h>
#include <string.h>
int main()
{
    char s[100];
    int i;
    printf("\n Enter a string:");
    gets(s);
    for(i=0; s[i] != '\0'; i++)
    {
        if(s[i] >= 'A' && s[i] <= 'z')
```

```c
    {
        s[i] = s[i] + 32;
    }
  ;
  printf ("\n string in lower case = %s", s);
  return 0;
}
```

Output: Enter a string : HELLO WORLD
        String in lower case : hello world

```c
# include < stdio. h>
char * toggle case ( char *a)
{
    for (int i=0; a[i]!= '\0'; i++)
    {
      a [i] ^ = 32;
    }
  return a;
}
int main ()
{
    char str [ ] = "cherry";
    printf ( "Toggle case : %s \n", toggle case
                               (str));
  printf ( "original string : %s", togglecase
                               (str));
  return 0;
}
```

Output : Toggle case : CHERRY
        original string : CHERRY.

```c
#include <stdio.h>
#include <string.h>
void strToSequence ( char * string )
{
    int length = 0, i = 0;
    length = strlen (string);
    for (i=0; i<length; i++).
    {
        if ((i == 0) && (string [i] >= 'a' &&
                string [i] <= 'z'))
        {
            string [i] = string [i] - 32;
        }
        else if ( string [i] == '.')
        {
            if (string [i+1] == ' ')
            {
                if ( string [i+2] >= 'a' &&
                        string [i+2] <= 'z')
                {
                    string [i+2] = string [i+2] - 32;
                }
            }
        }
        else
        {
            if ( string [i+1] >= 'a' && string ?
            {
                string [i+1] = string [i+1] - 32;
            }
        }
    }
}
```

```c
int main ()
{
    char string [50] = " ";
    int length = 0, i = 0, j = 0, k, c;
    printf ( "\n Enter the string: " );
    gets ( string );
    si n To sequences ( string );
    printf ( "final string is : %s", String );
    return 0;
}
```

output :
Enter the string : hello world. how are you?
final string is : Hello world. How are you?

(4)
```c
#include <stdio.h>
#include <string.h>
void concat ( char [ ], char [ ]);
int main ()
{
    char s1 [50], s2 [30];
    printf ( "\n Enter string 1 : ");
    gets (s1);
    printf ( "\n enter string 2 :");
    gets (s2);
    concat ( s1, s2 ) ;
    printf ( "\n concated string is : %s",s1);
    return (0);
}
void concat ( char s1 [ ] , char s2 [ ])
{
    int i,j;
    i = strlen (s1);
    for (j=0; s2 [j] != '\0' ; i++, j++)
```

```c
            s1[i] = s2[j];
        }
        s1[i] = '\0';
    }
```

output:
    Enter string1: Long
    Enter string2: Raut
    concated string is: Long Raut

(5)   #include <stdio.h>
        #include <string.h>
        int main()
        {
        char s[100];
        printf("enter a string to reverse\n");
        gets(s);
        strrev(s);
        printf("Reverse of the string: %s\n", s);
        return 0;
        }

output:
    Enter a string to reverse
    computer is an amazing device
    Reverse of entered string is
    ecived gnizama na si retupmo

(6)
```c
#include <sdio.h>
void main()
{
    char str[100], sstr[100];
    int pos, l, c = 0;
    printf("\nn extract a substring from
            a given string: \n");
    printf("................\n");
    printf("Input the string: ");
    fgets(str, sizeof str, stdin);
    printf("Input the position to start
            extraction: ");
    scanf("%d", &pos);
    printf("Input the length of substring: ");
    scanf("%d", &l);
    while (c < l)
    {
        sstr[c] = str[pos + c - 1];
        c++;
    }
    sstr[c] = '\0';
    printf("The substring retrieve from
            the string is: \"%s\"\n\n\n", sstr);
}
```

Output:
    Extract a substring from a given string:
Input the string: This is test string
Input the position to start extracting: 9
Input the length of substring: 4
The substring retrieve from the
            string is: "test"

```c
(7)  #include <stdio.h>
     #define N 10
     int main()
     {
       char Str1[80], Str2[80];
       int i;
       printf("Input a string");
       scanf("%s", Str2);
       for(i=0; Str2[i]!='\0'; i++)
       Str1[i] = Str2[i];
       Str1[i] = '\0';
       printf("\n");
       printf("original string : %s", Str1);
       printf("\n Number of Characters
                            \n", i);

       return 0;
     }

   output : Input a string
            original string : too long
            Number of Characters : 4
```

```c
(8)  #include <stdio.h>
     #include <string.h>
     int main()
     {
       char String1[20];
       int i, length;
       int flag =0;
       printf("enter a string : ")
       scanf("%s", String1);
       length = strlen(String1);
       for(i=0; i< length; i++)
       {
          if(String1[i] != String1[length
```

```c
        {
          flag = 1;
          break;
        }
      }
    if (flag) {
    printf("%s is not a palindrome", string1);
    }
    else {
      printf("%s is a palindrome", string1);
    }
    return 0;
}
```

output : Enter a string : Wow
            wow & a palindrome.

(9)   #include <stdio.h>
       #include <string.h>
       int main()
       {
         char s[1000], w[1000];
         int q, a[1000], i, j, k=0, l, found=0, t=0;
         printf("Enter the string :");
         gets(s);
         printf("Enter word to be searched:");
         gets(w);
         for(i=0; s[i]; i++)
         {
           if(s[i] == ' ')
           {
             a[k++] = i;
           }
         }
         a[k++] = i;
```

```c
j = 0;
for (i = 0; i < k; i++)
{
    n = a[i] - j;
    if (n == strlen(w))
    {
        t = 0;
        for (l = 0; w[l]; l++)
        {
            if (s[l+j] == w[l])
            {
                t++;
            }
        }
        if (t == strlen(w))
        {
            found++;
        }
    }
    j = a[i] + 1;
}
printf("word '%s' is occured count : ", w, found);
}
```

output:
    Enter the string : hello world hello
                       world hello world
Enter word to be searched : hello
The word 'hello' is occurred count : 3

```c
11c)  #include <stdio.h>
      #include <conio.h>
      #include <ctype.h>
      #include <string.h>
      void main ()
      {
        char   x[50], temp;
        int i, j, n;
        clrscr ();
        printf ("Enter a string:");
        gets (x);
        n = strlen (x);
        for (i=0; i<n-1; i++)
          for (j=0; j < n-1-j; j++)
          if (tolower (x[j]) > tolower(x[j+1]))
          {
            temp = x[j];
            x[j] = x[j+1];
            x[j+1] = temp;
          }
        printf ("Given string in alphabetical
                  order is %s", x);

        getch ();
      }
```

Output:
Enter a string: Programming Given
   String in alphabetical order
is aggimmnoprr.

(9)
```c
#| include <stdio.h>
# include <string.h>
char str [100];
void main()
{
    int i, t, j, len;
    printf ("enter a string :");
    scan ("%[^\n]s", str);
    len = str len (str);
    str [len] = '';
    for (t=0; i=0; i< strlen (str); i++)
    {
        if ((str [i] == '') && (str [i-1] == s))
        {
            for (j = t; j< i; j++)
                printf ("%c", & str [i]);
            t = i+1;
            printf ("\n");
        }
        else
        {
            if (str [i] == 'i')
            {
                t = i+1;
            }
        }
    }
}
```

Output:

Enter a string: welcome to santo...
    C programming class, welcome again!
    class!
    santoundary's
    class.

```c
(12)  #include <stdio.h>
      #include <string.h>
      int main()
      {
        char string [256], text [256], words [100]
                                              [256];
        int i, j, k, n;
        i = j = k = n = 0;
        while (string [i] ! = '\0')
        {
          if (string [i] = = '')
          {
            words [i] [k] = '\0';
            k = 0;
            j++;
          }
          else
          {
            words [i] [k++] = string [i];
          }
          i++;
        }
        words [i] [k] = '\0';
        n = j;
        for (i = 0; i < n; i++)
        {
          for (j = i+1; j < = n; j++)
          {
            if (strcmp (words [i], words [j] = = 0)
            {
              for (k = j; k < n; k++)
              {
                strcpy (words [k], words [k+1]);
                {
```

```c
        n--, j--;
      }
    }
  }
  for (i=0; i<=q; i++)
  {
    printf ("%s", words[i]);
  }
  printf ("\n");
  return 0;
}
```

Output:
enter your input string : hello would he
would hello hello hell
hello would hell.