PS STRING

1) input: apple output: apple 1211 25

```c
#include <stdio.h>
#include<string.h>
int main() {
    char s[100];
    fgets(s,100,stdin);
    s[strcspn(s,"\n")]='\0';
    printf("%s\n",s);
    int sum=0;
    for(int i=0;s[i]!='\0';i++)
    {
        if(s[i]==s[i+1])
        {
            printf("2");
            sum+=2;
            i++;
        }
        else
        {
            printf("1");
            sum+=1;
        }
    }
    printf("\n%d",sum*sum);
}
```

```
/tmp/N6RcCgTNJe.o
hiii  hello
hiii  hello
12121121
121

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

2) (get input as array of string and return its even indexed string)

main.c | Share | Run | Output

```c
#include <stdio.h>
#include<string.h>
int main() {
    int n;
    scanf("%d",&n);
    while(getchar()!='\n');
    char s[100][100];
    for(int i=0;i<n;i++)
    {
        fgets(s[i],100,stdin);
        s[i][strcspn(s[i],"\n")]='\0';
    }
    for(int i=1;i<n;i+=2)
    {
        printf("%s\n",s[i]);
    }
}
```

```
/tmp/9wts5OUF3I.o
4
hii
i
am
kani
i
kani


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

3)highest frequency

```c
#include <stdio.h>
#include<string.h>
int main() {
        char s[100];
        fgets(s,100,stdin);
        s[strcspn(s,"\n")]='\0';
        int len=strlen(s),count=1,max=0;
        char c;
        for(int i=0;i<len;i++)
        {
            count=1;
            if(s[i]!='\0')
            {
                for(int j=i+1;j<len;j++)
                {
                    if(s[i]==s[j])
                    {
                        count++;
                        s[j]='\0';
                    }
                }
            }
            if(count>max)
            {
                max=count;
                c=s[i];
            }
        }
        printf("'%c' occurs %d times",c,max);
}
```

```
/tmp/UZr37n1QDH.o
jananijamunakarthikaakanigasreekavipriyakavyadharshini
'a' occurs 14 times

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

4)FREQUENCY OF THE FIRST REPEATING CHARACTER

```c
#include <stdio.h>
#include<string.h>
int main() {
  char s[100];
  fgets(s,100,stdin);
  s[strcspn(s,"\n")]='\0';
  int n=strlen(s),count=1;
  for(int i=0;i<n;i++)
  {
     count=1;
     if(s[i]!='\0')
     {
         for(int j=i+1;j<n;j++)
         {
             if(s[i]==s[j])
             {
                 count++;
                 s[j]='\0';
             }
         }
         if(count>1)
         {
             printf("'%c' occurs %d times",s[i],count);
             break;
         }
     }
  }
}
```

```
/tmp/3DbYH395Qj.o
janani jamuna
'j' occurs 2 times

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

5)RETURN NUMBER OF PEOPLE WHOSE AGE ABOVE 60

```c
#include <stdio.h>
#include<string.h>
int main() {
   int n,i=0,j=0,num=0,count=0;
   scanf("%d",&n);
   getchar()!='\n';
   char s[100][100];
   for(int i=0;i<n;i++)
   {
      fgets(s[i],100,stdin);
      s[i][strcspn(s[i],"\n")]='\0';
   }
   char age[3];
   for(i=0;i<n;i++)
   {
      for(j=0;j<2;j++)
      {
         age[j]=s[i][11+j];
      }
      age[j]='\0';
      j=0,num=0;
      while(age[j]!='\0')
      {
         num=(num*10)+(age[j]-'0');
         j++;
      }
      printf("%d\n",num);
      if(num>60)
          count++;
   }
   printf("%d",count);
}
```

```
/tmp/ckvrLYhcYx.o
3
1234567890F6389
1234567890M5289
1234567890F6611
63
52
66
2

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

6)Find the maximum of a character in a given string .Igore the case(lower or upper case).Return the character in lower case Input:Test Output:t

```c
#include <stdio.h>
#include<string.h>
#include<ctype.h>
int main() {
      char s[100],c;
      fgets(s,100,stdin);
      s[strcspn(s,"\n")]='\0';
      int n=strlen(s),count=1,max=0;
      for(int i=0;i<n;i++)
      {
          count=1;
          if(s[i]!='\0')
          {
              for(int j=i+1;j<n;j++)
              {
                 s[i]=tolower(s[i]);
                 if(s[i]==(tolower(s[j])))
                 {
                     count++;
                     s[j]='\0';
                 }
              }
              if(count>max)
              {
                  max=count;
                  c=s[i];
              }
          }
      }
      printf("%c",c);
}
```

```
/tmp/kEKd8rKQcq.o
HIiheLlo
h

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

7)Print the given string without alphabets eg: Input:Lenova123@#45 Output:123@#45

```c
#include <stdio.h>
#include<string.h>
int main() {
    char s[100],c;
    fgets(s,100,stdin);
    s[strcspn(s,"\n")]='\0';
    int n=strlen(s);
    for(int i=0;i<n;i++)
    {
        if((s[i]>='a' && s[i]<='z')||(s[i]>='A' && s[i]<='Z'))
            continue;
        else
            printf("%c",s[i]);
    }
}
```

```
/tmp/dpzJd7tcBj.o
lenova@1233#bsmdh00
@1233#00

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

8)Print the first non-repeating char in the string.

```c
#include <stdio.h>
#include<string.h>
int main() {
    char s[100],c;
    fgets(s,100,stdin);
    s[strcspn(s,"\n")]='\0';
    int n=strlen(s),count=1;
    for(int i=0;i<n;i++)
    {
        count=1;
        if(s[i]!='\0')
        {
            for(int j=i+1;j<n;j++)
            {
                if(s[i]==s[j])
                {
                    count++;
                    s[j]='\0';
                }
            }
            if(count==1)
            {
                printf("%c",s[i]);
                return 0;
            }
        }
    }
    printf("Not found");
}
```

```
/tmp/UeZxbk5sH7.o
jjaamm
Not found

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

9)Replace space with %20

```c
#include <stdio.h>
#include<string.h>
int main() {
    char s[100],c;
    fgets(s,100,stdin);
    s[strcspn(s,"\n")]='\0';
    int n=strlen(s),index=-1;
    for(int i=0;i<n;i++)
    {
        if(s[i]==' ')
        {
            printf("%%20");
        }
        else
        printf("%c",s[i]);
    }
}
```

```
/tmp/Gjro2SpqFg.o
hii hello
hii%20hello

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

10)Replace character with input character

```c
#include <stdio.h>
#include<string.h>
int main() {
    char s[100];
    fgets(s,100,stdin);
    s[strcspn(s,"\n")]='\0';
    char c,r;
    scanf(" %c",&c);
    scanf(" %c",&r);
    int n=strlen(s);
    for(int i=0;i<n;i++)
    {
        if(s[i]==c)
        {
            s[i]=r;
        }
    }
    printf("%s",s);
}
```

```
/tmp/4y4tXsMwTP.o
hii hello
l
u
hii heuuo

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

11)reverse the word in string output: i am good input: good am i

```c
#include <stdio.h>
#include<string.h>
int main() {
    char s[100],r[100];
    fgets(s,100,stdin);
    s[strcspn(s,"\n")]='\0';
    int n=strlen(s)-1,start=0,end=n,k=0;
    while(n>=0)
    {
        if(s[n]==' ')
        {
            start=n+1;
            for(int j=start;j<=end;j++)
            {
                r[k]=s[j];
                k++;
            }
            r[k]=' ';
            k++;
            end=start-1;
        }
        n--;
    }
    for(int i=0;i<=end;i++)
    {
        r[k]=s[i];
        k++;
    }
    r[k]='\0';
    printf("%s",r);
}
```

```
/tmp/Xyj7Ul2zGx.o
good am i
i am  good

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

12)input: 3 [apple,mango.orange]
output: 5 (second maximum length)

```c
#include <stdio.h>
#include<string.h>
int main() {
    int n;
    scanf("%d",&n);
    getchar()!='\n';
    char s[200][200];
    int first=0;
    int second=0;
    for(int i=0;i<n;i++)
    {
        fgets(s[i],100,stdin);
        s[i][strcspn(s[i],"\n")]='\0';
    }
    for(int i=0;i<n;i++)
   {
       int len=strlen(s[i]);
       if(len>first)
       {
           second=first;
           first=len;
       }
       else if(len>second && len<first)
           second=len;
   }
    if(second==0)
    {
        printf("%d",0);
        return 0;
    }
   printf("%d",second);
}
```

```
/tmp/f2IRpOyAWl.o
3
hii
hii
hii
0

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

13)Duplicate(output: Hello input: Helo)

```c
#include <stdio.h>
#include<string.h>
int main() {
     char s[100];
     fgets(s,100,stdin);
     s[strcspn(s,"\n")]='\0';
     int n=strlen(s);
      for(int i=0;i<n;i++)
      {
         if(s[i]!='\0')
         {
             for(int j=i+1;j<n;j++)
             {
                 if(s[i]==s[j])
                    s[j]='\0';
             }
             printf("%c",s[i]);
         }
      }
}
```

```
/tmp/M2ruqlCEpA.o
momo
mo

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

14)Replace space with special characters input : hello world & output:hello&world

```c
#include <stdio.h>
#include<string.h>
int main() {
     char s[100];
     fgets(s,100,stdin);
     s[strcspn(s,"\n")]='\0';
     char c;
     scanf(" %c",&c);
     int n=strlen(s);
      for(int i=0;i<n;i++)
      {
         if(s[i]==' ')
         {
             printf("%c",c);
         }
         else
            printf("%c",s[i]);
      }
}
```

```
/tmp/66H7shawe2.o
hii hello how r u
-
hii-hello-how-r-u

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

15)Remove vowels and print

```c
#include <stdio.h>
#include<string.h>
#include<ctype.h>
int main() {
     char s[100];
     fgets(s,100,stdin);
     s[strcspn(s,"\n")]='\0';
     int n=strlen(s);
      for(int i=0;i<n;i++)
      {
         s[i]=tolower(s[i]);
         if(s[i]=='a'||s[i]=='e'||s[i]=='i'||s[i]=='o'||s[i]=='u')
               continue;
         else
            printf("%c",s[i]);
      }
}
```

```
/tmp/gNjykqyF8w.o
jananijamuna
jnnjmn

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

16)Print the unique characters

```c
#include <stdio.h>
#include<string.h>
#include<ctype.h>
int main() {
      char s[100];
      fgets(s,100,stdin);
      s[strcspn(s,"\n")]='\0';
      int n=strlen(s),count;
       for(int i=0;i<n;i++)
       {
           count=1;
          if(s[i]!='\0')
          {
                s[i]=tolower(s[i]);
                for(int j=i+1;j<n;j++)
                {
                    if(s[i]==tolower(s[j]))
                    {
                        s[j]='\0';
                        count++;
                    }
                }
                if(count==1)
                printf("%c",s[i]);
          }

       }
}
```

```
/tmp/nDM7JXatkg.o
KanigAsree
knigsr

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

17)Print consecutive repeated characters

```c
#include <stdio.h>
#include<string.h>
#include<ctype.h>
int main() {
      char s[100];
      fgets(s,100,stdin);
      s[strcspn(s,"\n")]='\0';
      int n=strlen(s),count;
       for(int i=0;i<n;i++)
       {
          count=1;
          while(i<n-1 && s[i]==s[i+1])
          {
              count++;
              i++;
          }
          if(count>1)
          {
              printf("%c=>%d\n",s[i],count);
          }
        }
}
```

```
/tmp/ABmLvt8QEL.o
hello hiii
l=>2
i=>3


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

18)instead of last occurrence character print the given character

```c
#include <stdio.h>
#include<string.h>
int main() {
    char s[100];
    fgets(s,100,stdin);
    s[strcspn(s,"\n")]='\0';
    char c,r;
    scanf(" %c",&c);
    scanf(" %c",&r);
    int n=strlen(s)-1,index=-1;
    for(int i=0;i<n;i++)
    {
        if(s[i]==c)
        {
            index=i;
        }
    }
    if(index!=-1)
    {
        s[index]=r;
    }
    printf("%s",s);
}
```

```
/tmp/ilWb3I5upA.o
hii hello
l
a
hii helao

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

19)Isomorphic string

```c
#include <stdio.h>
#include<string.h>
#include<ctype.h>
int main() {
    char s1[100],s2[100];
    fgets(s1,100,stdin);
    s1[strcspn(s1,"\n")]='\0';
    fgets(s2,100,stdin);
    s2[strcspn(s2,"\n")]='\0';
    int n1=strlen(s1),n2=strlen(s2);
    if(n1!=n2)
    {
        printf("Not isomorphic");
        return 0;
    }
    int freq1[26]={0};
    int freq2[26]={0};
    for(int i=0;i<n1;i++)
    {
        s1[i]=tolower(s1[i]);
        s2[i]=tolower(s2[i]);
        if(freq1[s1[i]-'a']++!=freq2[s2[i]-'a']++)
        {
            printf("Not isomorphic.");
            return 0;
        }

    }
    printf("Isomorphic");
}
```

```
/tmp/oBigRHinfv.o
Paper
title
Isomorphic

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

20)Reverse a string and print characters in odd index

```c
#include <stdio.h>
#include<string.h>
#include<ctype.h>
int main() {
    char s[100];
    fgets(s,100,stdin);
    s[strcspn(s,"\n")]='\0';
    int end=strlen(s)-1,start=0;
    char temp;
    while(start<end)
    {
        temp=s[start];
        s[start]=s[end];
        s[end]=temp;
        start++;
        end--;
    }
    printf("%s\n",s);
    for(int i=0;s[i]!='\0';i++)
    {
        if(i%2!=0)
        printf("%c",s[i]);
    }
}
```

```
/tmp/ELIFJ4paan.o
kanigasree
eersaginak
esgnk

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

21)Anagram

```c
#include <stdio.h>
#include<string.h>
#include<ctype.h>
int main() {
    char s1[100],s2[100];
    fgets(s1,100,stdin);
    s1[strcspn(s1,"\n")]='\0';
    fgets(s2,100,stdin);
    s2[strcspn(s2,"\n")]='\0';
    int n1=strlen(s1),n2=strlen(s2);
    int freq1[26]={0};
    if(n1!=n2)
    {
        printf("Not anagram");
        return 0;
    }
    for(int i=0;s1[i]!='\0';i++)
    {
        s1[i]=tolower(s1[i]);
        freq1[s1[i]-'a']++;
    }
     for(int i=0;s2[i]!='\0';i++)
    {
        s2[i]=tolower(s2[i]);
        freq1[s2[i]-'a']--;
    }
    for(int i=0;i<26;i++)
    {
        if(freq1[i]!=0)
        {
            printf("Not anagram");
            return 0;
        }
    }
    printf("Anagram");
}
```

```
/tmp/W5rv34Irte.o
silent
listen
Anagram

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

22)Pangram

```c
#include <stdio.h>
#include<string.h>
#include<ctype.h>
int main() {
   char s[100];
   fgets(s,100,stdin);
   s[strcspn(s,"\n")]='\0';
   int freq[26]={0};
   for(int i=0;s[i]!='\0';i++)
   {
       s[i]=tolower(s[i]);
       freq[s[i]-'a']++;
   }
   for(int i=0;i<26;i++)
   {
       if(freq[i]==0)
       {
           printf("Not pangram");
           return 0;
       }
   }
   printf("Pangram");
}
```

```
/tmp/XWJ1Xz1jdE.o
the quick brown fox jumps over a lazy dog
Pangram

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

23)REMOVE A WORD [INPUT: THIS IS MY FRIEND IS OUTPUT: THIS MY FRIEND]

```c
#include <stdio.h>
#include<string.h>
#include<ctype.h>
int main() {
   char s[100];
   fgets(s,100,stdin);
   s[strcspn(s,"\n")]='\0';
   char word[100];
   fgets(word,100,stdin);
   word[strcspn(word,"\n")]='\0';
   int n=strlen(s),wordlen=strlen(word),j;
   for(int i=0;i<n;i++)
   {
     if(s[i]==word[0])
     {
        int index=0;
        int found=1;
        while(word[index]!='\0')
        {
           if(s[i+index]!=word[index])
           {
              found=0;
              break;
           }
           index++;
        }
        if((found==1) && (i==0 || s[i-1]==' ')&& (i+wordlen==n || s[i+wordlen]==' '))
        {
          for(int k=i;k<=n-wordlen;k++)
             {
                s[k]=s[k+wordlen];
             }
          n-=wordlen;
          i--;
        }
     }
   }
   printf("%s",s);
}
```

```
/tmp/GbxZYozKq2.o
the programming language
programming
the  language

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

24)TItle case
input: i am dOiNG greaT
otput: I Am Doing Great

```c
#include <stdio.h>
#include<string.h>
#include<ctype.h>
int main() {
    char s[100];
    fgets(s,100,stdin);
    s[strcspn(s,"\n")]='\0';
    int n=strlen(s);
      s[0]=toupper(s[0]);
    for(int i=1;i<n;i++)
    {
       if(s[i-1]==' ')
       {
          s[i]=toupper(s[i]);
       }
       else
       s[i]=tolower(s[i]);
    }
    printf("%s",s);
}

```

```
/tmp/sYl9m2bs7Y.o
i aM  doinG  greaT
I Am  Doing  Great

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

25)PRINT THE SUM OF DIGITS IN A STRING AND REVERSE IT.

```c
#include <stdio.h>
#include<string.h>
#include<ctype.h>
int main() {
    char s[100];
    fgets(s,100,stdin);
    s[strcspn(s,"\n")]='\0';
    int n=strlen(s),sum=0;
    for(int i=0;i<n;i++)
    {
       if(isdigit(s[i]))
       {
          sum+=s[i]-'0';
       }
    }
    int rem=0,rev=0;
    while(sum>0)
    {
       rem=sum%10;
       rev=rev*10+rem;
       sum/=10;
    }
    printf("%d",rev);
}

```

```
/tmp/DxOAKXKTZh.o
hii5555iamkani7
72

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

26)Count of first occurence of a character

```c
#include <stdio.h>
#include<string.h>
#include<ctype.h>
int main() {
    char s[100];
    fgets(s,100,stdin);
    s[strcspn(s,"\n")]='\0';
    char c;
    scanf(" %c",&c);
    c=tolower(c);
    int n=strlen(s);
    for(int i=0;i<n;i++)
    {
       s[i]=tolower(s[i]);
       if(s[i]==c)
       {
           printf("%d",i);
           return 0;
       }
    }
    printf("Not found");
}
```

```
/tmp/OuFzmX19TQ.o
i am kani
a
2

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

27)Toggle Case :

Input 1:
BelIeVE yourSELF
Output 1:
bELiEve YOURself

```c
#include <stdio.h>
#include<string.h>
#include<ctype.h>
int main() {
    char s[100];
    fgets(s,100,stdin);
    s[strcspn(s,"\n")]='\0';
    int n=strlen(s);
    for(int i=0;i<n;i++)
    {
       if(s[i]>='A' && s[i]<='Z')
        s[i]=tolower(s[i]);
       else if(s[i]>='a' && s[i]<='z')
         s[i]=toupper(s[i]);
    }
    printf("%s",s);
}
```

```
/tmp/DvUaW5m3Pk.o
BelIeVE yourSELF
bELiEve YOURself

=== Code Execution Successful ==
```

28)Count the number of alphabets in the string. Then find the count is prime number or even or odd :

Input 1:
Rain fall, earth drinks
Output 1:
19
19 is a prime number.

Input 2:
peace settles
Output 2:

12
12 is even.

```c
#include <stdio.h>
#include<string.h>
#include<ctype.h>
int main() {
    char s[100];
    fgets(s,100,stdin);
    s[strcspn(s,"\n")]='\0';
    int n=strlen(s),count=0;
    for(int i=0;i<n;i++)
    {
        s[i]=tolower(s[i]);
        if(s[i]>='a' && s[i]<='z')
            count++;
    }
    int flag=1;
    for(int i=2;i<=count/2;i++)
    {
        if(count%i==0)
        {
            flag=0;
            break;
        }
    }
    if(flag==1)
     printf("%d is a prime number",count);
    else if(count%2==0)
     printf("%d is even",count);
    else if(count%2!=0)
      printf("%d is odd",count);
}
```

```
/tmp/CWUTKynNZ3.o
asdfghfsg
9 is odd

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

30)find the longest substring palindrome(input1:Efficient output1:ici)

```c
#include <stdio.h>
#include<string.h>
#include<ctype.h>
int palin(int start,int end,char s[])
{
    while(start<end)
    {
        if(s[start]!=s[end])
        {
            return 0;
        }
        start++;
        end--;
    }
    return 1;
}
int main() {
    char s[100];
    fgets(s,100,stdin);
    s[strcspn(s,"\n")]='\0';
    int n=strlen(s);
    int i=0,num=0,max=0;
    char max_palin[100]={0};
    while(i<n)
    {
        for(int j=i;j<n;j++)
        {
            if(palin(i,j,s))
            {
                num=j-i+1;
                if(max<num)
                {
                    max=num;
                    strncpy(max_palin,s+i,max);
                }
                max_palin[max]='\0';
            }
        }
        i++;
    }
    printf("%s",max_palin);
}
```

```
/tmp/lE994WLReh.o
speeeddetection
edde

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

31)SUM OF THE NUMBER IN THE STRING JOB. SUM=123+45,OUPUT=168 INPUT:HELLO I AM 123? HOW ARE YOU 45 DONE

```c
#include <stdio.h>
#include<string.h>
#include<ctype.h>
int main() {
    char s[100];
    fgets(s,100,stdin);
    s[strcspn(s,"\n")]='\0';
    int n=strlen(s),res=0;
    char ans[100]={0};
    for(int i=0;i<n;i++)
    {
        int index=0;
       while(isdigit(s[i]))
       {
           ans[index]=s[i];
           i++;
           index++;
       }
       ans[index]='\0';
       int j=0,num=0;
       while(ans[j]!='\0')
       {
           num=num*10+(ans[j]-'0');
           j++;
       }
       res+=num;
    }
    printf("%d",res);
}
```

```
/tmp/OaXbzAZt0p.o
hii12345jdg35
12380

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

32)Extract the number from the string

```c
#include <stdio.h>
#include<string.h>
#include<ctype.h>
int main() {
    char s[100];
    fgets(s,100,stdin);
    s[strcspn(s,"\n")]='\0';
    int n=strlen(s),res=0;
    char ans[100]={0};
    for(int i=0;i<n;i++)
    {
        int index=0;
       while(isdigit(s[i]))
       {
           ans[index]=s[i];
           i++;
           index++;
       }
       ans[index]='\0';
       if(index>0)
       printf("%s\n",ans);
    }
}
```

```
/tmp/qUxUZVDfvs.o
h000j1k6g7
000
1
6
7


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

33)Swapping: INPUT:OpenAI OUTPUT:pOneIA

```c
#include <stdio.h>
#include<string.h>
#include<ctype.h>
int main() {
    char s[100];
    fgets(s,100,stdin);
    s[strcspn(s,"\n")]='\0';
    int n=strlen(s);
    char temp;
    for(int i=1;i<n;i+=2)
    {
        temp=s[i];
        s[i]=s[i-1];
        s[i-1]=temp;
    }
    printf("%s",s);
}
```

```
/tmp/geb2cJ24da.o
OpenAI
pOneIA

=== Code Execution Successful
```

35)90 degree rotation

input:

A B C

D E F

G H I

output:

G D A

H E B

I F C

```c
#include <stdio.h>
#include<string.h>
int main() {
    int n;
    scanf("%d",&n);
    getchar()!='\n';
   char s[n][n];
    for(int i=0;i<n;i++)
    {
        for(int j=0;j<n;j++)
        {
            scanf(" %c",&s[i][j]);
        }
    }
    for(int i=0;i<n;i++)
    {
        for(int j=n-1;j>=0;j--)
        {
            printf("%c ",s[j][i]);
        }
        printf("\n");
    }
}
```

```
/tmp/SEtHiE79JV.o
4
a b c d
e f g h
i j k l
m n o p
m i e a
n j f b
o k g c
p l h d


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

36)Remove leading zeros and check if the strings are equal,lesser or greater.

```c
#include <stdio.h>
#include<string.h>
int main() {
    char s1[100];
    fgets(s1,100,stdin);
    s1[strcspn(s1,"\n")]='\0';
    char s2[100];
    fgets(s2,100,stdin);
    s2[strcspn(s2,"\n")]='\0';
    int i=0,j=0,n1=strlen(s1),n2=strlen(s2);
    printf("%s and %s are ",s1,s2);
    while (s1[i] == '0')
        i++;
    if (i > 0)
        strcpy(s1, &s1[i]);
    while (s2[j] == '0')
        j++;
    if (j > 0)
        strcpy(s2, &s2[j]);
     int res=strcmp(s1,s2);
     if(res==0)
      printf(" equal");
     else if (res>0)
         printf(" greater");
      else if(res<0)
          printf(" lesser");
}
```

```
/tmp/cpKRcNI496.o
0000.200
00.20
0000.200 and 00.20 are  greater

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

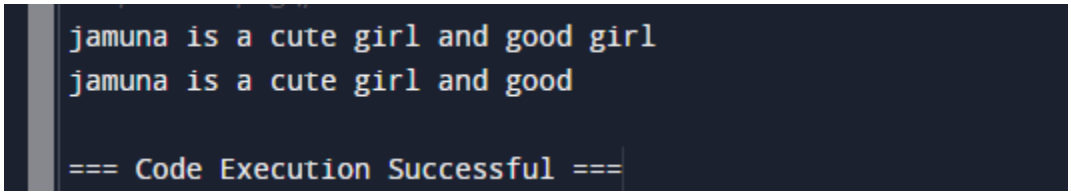
37)Delete repeated words

```c
#include <stdio.h>
#include<string.h>
int main() {
   char s[100];
   fgets(s,100,stdin);
   s[strcspn(s,"\n")]='\0';
   int n=strlen(s),end=n-1,start=0,found=1;
   char word[100];
   for(int i=0;i<n;i++)
   {
      if(s[i]==' ')
      {
         end=i-1;
         int index=0;
         for(int j=start;j<=end;j++)
         {
            word[index]=s[j];
            index++;
         }
         start=end+2;
         word[index]='\0';
         for(int k=end+2;s[k]!='\0';k++)
         {
            if(s[k]==word[0] && (s[k+strlen(word)]==' ' || k+strlen(word)==n) && (s[k-1]==' '|| k==0))
```

```
            {
                int found=1;
                int index=0;
                for(int l=k;word[index]!='\0';l++)
                {
                    if(s[l]!=word[index])
                    {
                        found=0;
                        break;
                    }
                    index++;
                }

                if(found==1)
                {
                    for(int m=k;m<=n-strlen(word);m++)
                    {
                        s[m]=s[m+strlen(word)];
                    }
                    n-=strlen(word);
                }
            }
        }
    }
    printf("%s",s);

}
```



38) railway timing

main.c Share Run Output

```c
#include <stdio.h>
#include <string.h>
int main() {
char time[9];
int hours, minutes, seconds;
printf("Enter the time in HH:MM:SS format: ");
scanf("%8s", time);
sscanf(time, "%d:%d:%d", &hours, &minutes, &seconds);
printf("Hours: %d Minutes: %d Seconds: %d\n", hours, minutes,
    seconds);
return 0;
}
```

```
/tmp/bmxsCOOwnz.o
Enter the time in HH:MM:SS format: 01:23:45
Hours: 1 Minutes: 23 Seconds: 45


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

39)Reverse a word in string! (Input: Hello World, || Output: olleH dlorW)

```c
#include <stdio.h>
#include<string.h>
int main() {
   char s[100];
   fgets(s,100,stdin);
   s[strcspn(s,"\n")]='\0';
   char rev[100]={0};
   int n=strlen(s),end,start=0,index=0;
   for(int i=0;i<n;i++)
   {
      while(s[i]!=' ' && i!=n)
      {
         i++;
      }
      end=i-1;
      for(int k=end;k>=start;k--)
      {
         rev[index]=s[k];
         index++;
      }
      rev[index]=' ';
      index++;
      start=i+1;
   }
   printf("%s",rev);
}
```

```
/tmp/cS8c5MEOsx.o
helllo  world
ollleh  dlrow

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

40)Find the largest and smallest word in a string. Input: The bottle is full Output: is bottle

```c
#include <stdio.h>
#include<string.h>
int main() {
    char s[100];
    fgets(s,100,stdin);
    s[strcspn(s,"\n")]='\0';
    int n=strlen(s),min=100,max=0;
    char mini[100]={0},maxi[100]={0};
    for(int i=0;i<n;i++)
    {
      int count=0;
      while(s[i+count]!=' ' && i+count!=n)
      {
          count++;
      }
      if(count<min && count!=0)
      {
          min=count;
          strncpy(mini,s+i,min);
          mini[min]='\0';
      }
      if(count>max)
      {
          max=count;
          strncpy(maxi,s+i,max);
          maxi[max]='\0';
      }
      i+=count;
    }
    printf("%s %s",mini,maxi);
}
```

```
/tmp/bcWMVtlIz2.o
jamuna is a bad girl
a jamuna

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

41)Find the largest number length in the given sentence. Input :- 4(range of words) This question is easy. Output:- 8(length of the largest word)

```c
#include <stdio.h>
#include<string.h>
int main() {
    char s[100];
    fgets(s,100,stdin);
    s[strcspn(s,"\n")]='\0';
    int n=strlen(s),max=0;
    for(int i=0;i<n;i++)
    {
      int count=0;
      while(s[i+count]!=' ' && i+count!=n)
      {
          count++;
      }
      if(count>max)
      {
          max=count;
      }
      i+=count;
    }
    printf("%d",max);
}
```

```
/tmp/Vpt1zKzlgB.o
janani jamuna kanigasree karthikaa
10

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

42)Smallest appeared character in a string

```c
#include <stdio.h>
#include<string.h>
int main() {
    char s[100];
    fgets(s,100,stdin);
    s[strcspn(s,"\n")]='\0';
    int n=strlen(s),min=100;
    int freq[256]={0};
    char c;
    for(int i=0;i<n;i++)
    {
      if(s[i]!=' ')
      {
         freq[s[i]]++;
      }
    }
    for(int i=0;i<256;i++)
    {
       if(freq[i]!=0 && freq[i]<min)
       {
          min=freq[i];
          c=i;
       }
    }
    printf("%c",c);
}
```

```
/tmp/oDRukD14AR.o
abcdcba
d

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

43)first occurrence of a word in a string Input string: I love programming! Input word to search: love Output 'love' is found at index 2.

```c
#include <stdio.h>
#include<string.h>
int main() {
    char s[100],word[100];
    fgets(s,100,stdin);
    s[strcspn(s,"\n")]='\0';
    fgets(word,100,stdin);
    word[strcspn(word,"\n")]='\0';
    int n=strlen(s);
    for(int i=0;i<n;i++)
    {
       if(s[i]==word[0])
       {
          int found=1;
          for(int k=0;word[k]!='\0';k++)
          {
             if(s[k+i]!=word[k])
             {
                found=0;
                break;
             }
          }
          if(found==1)
          {
             if((s[i+strlen(word)]==' '|| i+strlen(word)==n) &&(s[i-1]==' ' || i==0))
             {
                printf("'%s' is found at index %d",word,i);
                return 0;
             }
          }
       }
    }
}
```

```
/tmp/H2qX1OQuoy.o
hii hello fine
fine
'fine' is found at index 10

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

44)minimum length between two words in the string

```
#include <stdio.h>
#include<string.h>
int main() {
  int n;
  scanf("%d",&n);
  getchar()!='\n';
  char s[100][100];
  char word1[100],word2[100];
  for(int i=0;i<n;i++)
  {
    fgets(s[i],100,stdin);
    s[i][strcspn(s[i],"\n")]='\0';
  }
  fgets(word1,100,stdin);
  word1[strcspn(word1,"\n")]='\0';
  fgets(word2,100,stdin);
  word2[strcspn(word2,"\n")]='\0';
  int found1=0,found2=0,index1=-1,index2=-1;
  for(int i=0;i<n;i++)
  {
    if(found1!=1)
    {
      int found=0;
      if(strcmp(s[i],word1)==0)
      {
        found1=1;
        index1=i;
      }
    }
    if(found2!=1)
    {
      int found2=0;
      if(strcmp(s[i],word2)==0)
      {
        found2=1;
        index2=i;
      }
    }
  }
  if(index1!=-1 && index2!=-1)
  {
    printf("%d",index2-index1);
  }
  else
  {
    printf("one or both of the words are not found");
  }
}
```

```
/tmp/CGIK/esaI1.o
9
success
is
falling
nine
times
and
gett
up
ten
nine
up
4
```

45)Left rotation

```c
#include <stdio.h>
#include<string.h>
int main() {
    int n;
    scanf("%d",&n);
    getchar()!='\n';
   char s[100];
   fgets(s,100,stdin);
   s[strcspn(s,"\n")]='\0';
   int len=strlen(s);
   char temp;
   for(int i=0;i<n;i++)
   {
       temp=s[0];
       for(int j=0;j<len-1;j++)
       {
           s[j]=s[j+1];
       }
       s[len-1]=temp;
   }
   printf("%s",s);
}
```

```
/tmp/xqk4PaQCbc.o
2
jamuna
munaja

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

46)right rotation

```c
#include <stdio.h>
#include<string.h>
int main() {
     int n;
     scanf("%d",&n);
     getchar()!='\n';
    char s[100];
    fgets(s,100,stdin);
    s[strcspn(s,"\n")]='\0';
    int len=strlen(s);
    char temp;
    for(int i=0;i<n;i++)
    {
        temp=s[len-1];
        for(int j=len-1;j>=1;j--)
        {
            s[j]=s[j-1];
        }
        s[0]=temp;
    }
    printf("%s",s);
}
```

```
/tmp/USrACXz251.o
2
geeksforgeeks
ksgeeksforgee

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

47)valid time

```c
#include <stdio.h>
#include<string.h>
int main() {
    char time[9];
    int hour,minutes,seconds;
    scanf("%8s",time);
    sscanf(time,"%d:%d:%d",&hour,&minutes,&seconds);
    if((hour>=0 && hour<=23) &&(minutes>=0 && minutes<=59) &&(seconds>=0 && seconds<=59))
    {
        printf("%s",time);
    }
    else
     printf("Invalid time");
}
```

```
/tmp/73z5wuWNLA.o
24:45:30
Invalid time

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

VERSION CONTROL:

```c
#include <stdio.h>
#include <string.h>
#define MAX 100

int main()
{
    char v1[MAX];
    fgets(v1,MAX,stdin);
    v1[strcspn(v1,"\n")]='\0';
    int l1=strlen(v1);
```

```
char v2[MAX];
fgets(v2,MAX,stdin);
v2[strcspn(v2,"\n")]='\0';
int l2=strlen(v2);

int x1=0,x2=0;
for(int i=0;v1[i]!='\0';i++)
{
    if(v1[i]!='.')
    {
        x1=(x1*10)+(v1[i]-'0');
    }
}

for(int i=0;v2[i]!='\0';i++)
{
    if(v2[i]!='.')
    {
        x2=(x2*10)+(v2[i]-'0');
    }
}

if(x1>x2)
{
    printf("%s greater than %s",v1,v2);
}
else
{
    if(x2>x1)
    {
        printf("%s is greater than %s",v2,v1);
    }
    else
    {
        if(x1==x2)
        {
```

```
            printf("%s is equal to %s",v1,v2);
        }
    }
  }
}
```