```c
//arrays

//input string and ascii values
/*
#include<stdio.h>
 int main()
  {
    char str[25];
    printf("enter the string\n");
    fgets(str,25,stdin);


    for(int i=0;str[i]!='\0';i++)
    {
    printf("%d\t",str[i]);
    }
}
*/

//no less than greater or equal to zero

/*

#include<stdio.h>
int main()
{
int a[10];
int count1=0,count2=0,count3=0;
printf("enter the array of 10 element:\n");
for(int i=0;i<10;i++)
   {
     scanf("%d",&a[i]);

     }
for(int i=0;i<10;i++)
   {
       if(a[i]==0)
          {
              count1++;
         }
         else if(a[i]>0)
            {
                 count2++;

            }
            else
            {
            count3++;
            }
     }

  printf("the no of element less than zero is %d\n",count3);
    printf("the no of element greater than zero is %d\n",count2);
    printf("the no of element equal to zero is %d\n",count1);
}
*/

//copy the array
/*
#include<stdio.h>
 void main()
{
  int a[5],b[5],n,i;
```

```c
    printf("\nEnter array element");
    for(i=0;i<5;i++)
      {
        scanf("%d",&a[i]);
      }
    for(i=0;i<5;i++)
      {
        b[i]=a[i];
      }
    for(i=0;i<5;i++)
      {
        printf("\ncopy elements are=%d",b[i]);

      }
}
/*

//occrrance of no in the array
/*
#include<stdio.h>
 int main()
   {
     int n,m,i,count=0;
     printf("enter the no of element you want to store in the array\n");
     scanf("%d",&m);
     int a[m];
     printf("enter the two digit array element\n");
     for(int i=0;i<m;i++)
     {
       scanf("%d",&a[i]);

     }
     printf("enter the element to be search\n");
     scanf("%d",&n);
     for(int i=0;i<m;i++)
     {
       if(a[i]==n)
       {
         count++;
       }
     }

printf("the no %d is apperar int array %d times\n",n,count);
}
*/



//armstrong no
/*
#include<stdio.h>
 int main()
{
  int n,rem,res=0,k;
  printf("enter the no of element you want to store in the array\n");
  scanf("%d",&n);
  int a[n];
  printf("enter the array\n");
  for(int i=0;i<n;i++)
    {
      scanf("%d",&a[i]);
    }
  printf("the armstrong nos are\n");
  for(int i=0;i<n;i++)
    {
```

```c
  while(a[i]>0)
 {   k=a[i];
     rem=a[i]%10;
     res=res+rem*rem*rem;
     a[i]=a[i]/10;
 }

  if(res==k)
  {
   printf("%d",res);
  }

 }

}
*/


//deletion of elements
/*
 #include<stdio.h>
   int main()
  {
    int n,k;
       printf("enter the no of element you want to store in the array\n");
       scanf("%d",&n);
       int a[n];
       printf("enter the array\n");
       for(int i=0;i<n;i++)
     {
       scanf("%d",&a[i]);
     }
   printf("enter the index from where you want to delete the no in array\n");
       scanf("%d",&k);
       for(int i=k;i<n;i++)
     {
       a[i]=a[i+1];
     }
   n=n-1;
   printf("array after deletion\n");
   for(int i=0;i<n;i++)
      {
        printf("\n \n%d\n",a[i]);

      }

   }


  */
  ///frequency
/*
 #include<stdio.h>
  int main()
  {
   int n,m,temp1,max;
   printf("enter the no of element you want to store in the array\n");
   scanf("%d",&m);
   int a[m];
   printf("enter the two digit array element\n");
   for(int i=0;i<m;i++)
   {
   scanf("%d",&a[i]);

   }
    temp1=max=a[0];
```

```c
  for(int i=0;i<5;i++)
   {
    if(a[i]>max)
      {   temp1=max;
         max=a[i];
         }
   }
  int count[max+1];
  for(int i=0;i<max+1;i++)
  {
    count[i]=0;

  }
   for(int i=0;i<m;i++)
   {
    count[a[i]]++;

 }
 printf("occurences\n");
   for(int i=0;i<max+1;i++)
  {
    if(count[i]!=0)
      {
        printf("occccurences of the element %d is %d\n",a[i],count[a[i]]);

      }
  }
}
*/


///min maximum no

/*
#include<stdio.h>
int main()
{
int a[5],max,min,temp,temp1;
printf("enter the two digit array element\n");
for(int i=0;i<5;i++)
{
   scanf("%d",&a[i]);

}


temp1=max=a[0];
for(int i=0;i<5;i++)
{
   if(a[i]>max)
     {   temp1=max;
        max=a[i];
        }
}


min=max;
for(int i=0;i<5;i++)
   {
    temp=min;
     if(a[i]<min)
       {
       // printf("the 2nd min no in the array is %d\n",temp);
        min=a[i];
        }
```

```c
}
printf("the min no in the array is %d\n",min);
printf("the max no in the array is %d\n",max);
printf("the 2nd min no in the array is %d\n",temp);
printf("the 2nd max no in the array is %d\n",temp1);
}
*/


//palindrome
/*

#include<stdio.h>
int main()
{
 int a[10],k;
 printf("enter the array of 10 element:\n");
for(int i=0;i<10;i++)
  {
    scanf("%d",&a[i]);

    }

 for(int i=0;i<10;i++)
    {   k=a[i];
      int rev=0,rem;
       while(k>0)
        {
           rem=k%10;
           rev=rev*10+rem;
            k=k/10;
        }

           if(a[i]==rev)
             {
                printf("the palindrome  number %d is at the position in array at
index  %d\n",a[i],i);

             }
     }
}

*/

//merging

/*

 #include<stdio.h>
   int main()
 {
   int n,m,i;
    printf("enter the no of element you want to store in the array\n");
    scanf("%d",&m);
     int a[m];
   printf("enter the two digit array element\n");
   for(int i=0;i<m;i++)
   {
   scanf("%d",&a[i]);
   }
   printf("enter the no of element you want to store in the array\n");
   scanf("%d",&n);
   int b[n];
    printf("enter the two digit array element\n");
   for(int i=0;i<n;i++)
   {
```

```c
    scanf("%d",&b[i]);

  }

 int c[m+n];
 for(i=0;i<m;i++)
   {
      c[i]=a[i];
   }
 for(int j=0;j<n;j++,i++)
   {
      c[i]=b[j];
   }
printf("after merging\n");
for(int j=0;j<n+m;j++)
   {
      printf("%d\n",c[j]);
   }
}

*/



//subsequent array
/*
 #include<stdio.h>
 void main()
 {
  int n,m,i,max,sum;
  printf("enter the no of element you want to store in the array\n");
  scanf("%d",&m);
  int a[m];
  printf("enter the  array element\n");
  for(int i=0;i<m;i++)
  {
   scanf("%d",&a[i]);

  }
  max=0;
  for(i=0;i<m-1;i++)
  {
     sum=a[i]+a[i+1];
     if(sum>max)
      {
        max=sum;
      }

  }
  printf(" the max sum in subsequent array is %d\n",max);
}*/



//sort asending
/*


#include<stdio.h>
int main()
{
 int a[5],temp,i,j,k,n;
 n=5;
printf("enter the array element\n");
for( i=0;i<5;i++)
```

```c
{
    scanf("%d",&a[i]);

}

for(int j=0;j<n-1;j++)
    {
    for(int k=0;k<n-j-1;k++)
      {
        if(a[k+1]<a[k])
         {
            temp=a[k];
            a[k]=a[k+1];
            a[k+1]=temp;

         }
      }
    }
printf("array after sort in ascending order\n");
for(int i=0;i<5;i++)
{
    printf("%d\t",a[i]);

}



for(int j=0;j<n-1;j++)
    {
    for(int k=0;k<n-j-1;k++)
      {
        if(a[k+1]>a[k])
         {
            temp=a[k];
            a[k]=a[k+1];
            a[k+1]=temp;

         }
      }
    }
printf("\narray after sort in descending order\n");
for(int i=0;i<5;i++)
{
    printf("%d\t",a[i]);

}

}

*/

//array sort

/*
#include<stdio.h>
void main()
{ int n,temp;
printf("enter the no of element of the array do you want to insert\n");
scanf("%d",&n);

 int a[n];
 printf("enter the array of 10 element:\n");
for(int i=0;i<n;i++)
  {
    scanf("%d",&a[i]);
```

```c
        }
    for(int j=0;j<(n/2)-1;j++)
        {
        for(int k=0;k<(n/2)-j-1;k++)
            {
            if(a[k+1]<a[k])
              {
                temp=a[k];
                a[k]=a[k+1];
                a[k+1]=temp;

              }
            }

        }
    for(int j=n/2;j<n-1;j++)
        {
        for(int k=n/2;k<n-1;k++)
            {
            if(a[k+1]>a[k])
              {
                temp=a[k];
                a[k]=a[k+1];
                a[k+1]=temp;

              }
            }
        }

        printf("array after sort \n");
    for(int i=0;i<n;i++)
{
    printf("%d\t",a[i]);

}



}
*/


//intersection union


///intersection union
/*

#include<stdio.h>
int main()
{
int n,m,i,flag=0;
printf("enter the no of element you want to store in the array\n");
scanf("%d",&m);
int a[m];
printf("enter the two digit array element\n");
for(int i=0;i<m;i++)
{
    scanf("%d",&a[i]);

}
printf("enter the no of element you want to store in the array\n");
scanf("%d",&n);
int b[n];
```

```c
printf("enter the two digit array element\n");
for(int i=0;i<n;i++)
{
    scanf("%d",&b[i]);

}

 printf("intersection of the array\n");


 for(int i=0;i<m;i++)
    {
        for(int j=0;j<n;j++)
            {
                if(a[i]==b[j])
                    {
                        printf("%d\t",a[i]);
                    }
            }
    }
    printf("\nunion of the array\n");
 for(int i=0;i<m;i++)
    {
      printf("%d\t",a[i]);
    }
    for(int i=0;i<m;i++)
    {
        for(int j=0;j<n;j++)
            {
                if(b[i]==a[j])
                    {
                        flag=1;
                    }
            }
         if(flag==0)
         {
            printf("%d\t",b[i]);
         }
         flag=0;
    }
}
*/
```