1) Write a C.pgm to find, median, (for a list of n integers); mode(no. of highest frequency) and its frequency for a given set of integers. (functions).

2) Write a pgm to

    (i) Input two matrices and obtain their product

    (ii) Find transverse transpose of first matrix.

    (iii) Obtain sum of no.s on boundary of 2nd matrix.

3) Input a square matrix and test whether it is symmetric. (functions).

4)

(Median
  Assange)

```
for(i=0; i<n-1; i++)
{
   mode=0
   for(...)
   {
      if(a[i]==a[j])
         mode++;
   }

   if((mode>max) && (mode!=0))
   {
      k=0
      max=mode;
      b[k]=a[i];
      k++
   }
}
eg. else if(mode==max)
   {
      b[k]=a[i];
      k++
   }
}
```

```
//
for (i=0; i<n; i++)
{
   if(a[i]==b[i])
      c++;
}
c==0 => no mode
```

1) Write a C pgm to swap two no's using call by value and call by reference

2) Write a C pgm to sort a set of names using array of pointers, search for a given name and print name starting with given character.

3)