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Data structure Homework

Experiment Part

Session4-Part1

Write a program to implement Binary Search

```c
void main()
{
int  arra[100],i,n,x,f,l,m,flag=0;
printf("Input no. of elements in an array\n");
scanf("%d",&n);
printf("Input  %d value in ascending order\n",n);
for(i=0;i<n;i++)
scanf("%d",&arra[i]);
printf("Input  the value to be search : ");
scanf("%d",&x);
/* Binary Search  logic */
f=0;l=n-1;
while(f<=l)
{
m=(f+l)/2;
if(x==arra[m])
{
flag=1;
break;
}
else  if(x<arra[m])
l=m-1;
else
f=m+1;
}
if(flag==0)
printf("%d  value not found\n",x);
else
printf("%d value  found at %d position\n",x,m);
}
```

Result:

Output will be