1>>>

c.#include<stdio.h>

```
int main(){
    int a[]={1,2,3,4,5};
    int n,i,pos,num;
    printf("enetr the num and pos:");
    scanf("%d%d",&num,&pos);
    n=sizeof a/sizeof a[0];
    for(i=n-1;i>=pos-1;i--){
        a[i+1]=a[i];
    }
    a[pos-1]=num;
    n++;
    for(i=0;i<n;i++)
    {
        printf("%d",a[i]);
    }
}
```

d.#include<stdio.h>

```
int main(){
    int a[]={1,2,3,4,5,6,7};
    int n=sizeof a/sizeof a[0];
    int pos,i;
    scanf("%d",&pos);
    for(i=pos-1;i<n-1;i++){
        a[i]=a[i+1];
        n--;
    }
    for (i=0;i<n;i++){
        printf("%d",a[i]);
    }
}
```

e.#include<stdio.h>

```
int main(){
    int a[]={1,2,3,4,5};
    a[0]=9;
```

```
    int i;
    int n=sizeof a/sizeof a[0];
    for(i=0;i<n;i++){
        printf("%d",a[i]);
    }
}
```

2>>

3.

```
#include <stdio.h>
int fact();
int main(){
int a = 5;
printf("Factorial of %d is %d", a, fact(a));
return 0;
}
int fact(int n)
{
    if (n==0)
```

```
        return 1;
    return n*fact(n-1);
}
```

3>>>

```
#include<stdio.h>
int main(){
    int i,j,temp=0,c[10],d=0;
    int a[]={1,2,3,4,4,4,5,5,6,7,8};
    int l=sizeof a/sizeof a[0];
    for (i=0;i<l;i++){
        for (j=i+1;j<l;j++){
            if(a[i]==a[j]){
                printf("%d",a[j]);
            }
        }
    }
```

```
}
```

4>>>

```
4.#include<stdio.h>
int main(){
    int i,min,max;
    int a[]={1,2,3,4,5,6,7,8};
    max=min=a[0];
    int l=sizeof a/sizeof a[0];
    for (i=0;i<l;i++){
        if(a[i]<=min){
            min=a[i];
        }
    }
    printf("minimum=%d\n",min);
for (i=0;i<l;i++){
        if(a[i]>max){
            max=a[i];
        }
```

```
    }
     printf("maximum=%d\n",max);
}
5>>>


   #include <stdio.h>
int fib(int n) {
   if(n == 0)
      return 0;
   else if(n == 1)
      return 1;
   else
      return (fib(n-1) + fib(n-2));
}
int main() {
   int a=5;
   for (int i = 0; i < a; i++) {
      printf("%d ", fib(i));
      int sum=sum+i;
```

```
      printf("%d",sum);
   }
}
```

6>>>

```
        #include<stdio.h>
int main()
{
    int i,k=3;
    int a[8]={1,2,3,4,5};
    int l=sizeof a/sizeof a[0];
    for (i=0;i<=l;i++)
    {
        if(k==a[i])
        {
        printf("%d",a[i]);
        }
}
```

7>>>

```
#include<stdio.h>
int main(){
    int i, x,mid,low,high;
    int a[]={1,2,3,4,5};
    scanf("%d%d%d",&x,&low,&high);
    int l=sizeof a/sizeof a[0];
    mid=low+high/2;
    if (a[mid]==i){
        printf("%d\n",mid);
    }
    if(a[mid]<x){
        low+mid+1;
        printf("present at %d\n",low);
    }
    else{
        high=mid-1;
```

```
        printf("present at %d\n",high);
    }
}
```

8>>>

```
#include<stdio.h>
int main(){
    int i, x,mid,low,high;
    int a[]={1,2,3,4,5};
    scanf("%d%d%d",&x,&low,&high);
    int l=sizeof a/sizeof a[0];
    mid=low+high/2;
    if (a[mid]==i){
        printf("%d\n",mid);
    }
    if(a[mid]<x){
        low+mid+1;
        printf("present at %d\n",low);
```

```
    }
    else{
        high=mid-1;
        printf("present at %d\n",high);
    }
}
```