Modulo Division:

```
#include<iostream>
#include<stdio.h>
using namespace std;
class A
{
      public:
      int a[100],size,i,j,k,temp,temp2;
      void choice()
      {
             cout<<"Enter size of an Array "<<endl;</pre>
             cin>>size;
             a[size];
             int ch;
             for(i=0;i < size;i++)
             {
                    a[i]=0;
             }
             do
             {
             cout<<"Enter your choice. 1.insertion 2.search 3.display 4.exit"<<endl;</pre>
             cin>>ch;
                    switch(ch)
                    {
                          case 1:
                                 insert();
                          break;
```

```
case 2:
                         search();
                   break;
                   case 3:
                         display();
                   break;
            }
      }while(ch!=4);
}
void insert()
{
      /*cout<<"how many value you want to enter in and given array"<<endl;
      cin>>j;*/
      cout<<"Enter your data one by one "<<endl;</pre>
            cin>>temp;
            temp2=temp;
      if(temp2<size)
      {
            while(a[temp2]!=0)
            {
                  temp2++;
                  if(temp2>size-1)
                   {
```

```
temp2=0;
           }
     }
     if(a[temp2]==0)
     {
           a[temp2]=temp;
     }
}
else if(temp2>=size)
{
     temp2=temp2%10;
     cout<<temp2<<endl;
     while(a[temp2]!=0)
           {
                 temp2++;
                 if(temp2>size-1)
                 {
                      temp2=0;
                 }
           }
           if(a[temp2]==0)
           {
                 a[temp2]=temp;
           }
}
```

}

```
void search()
      {
             cout<<"Enter value you want to search in an given array"<<endl;</pre>
             cin>>k;
             for(i=0;i < size;i++)
             {
                    if(a[i]==k)
                    {
                           cout<<"Value is found at "<<i<<"th Position"<<endl;</pre>
                           break;
                    }
             }
             if(a[i]!=k)
             {
                    cout<<"Value is not found in an given array";</pre>
             }
      }
      void display()
      {
             cout<<"Given array is "<<endl;</pre>
             for(i=0;i < size;i++)
             cout<<a[i]<<endl;
      }
};
int main()
{
      Ao;
```

```
o.choice();
return 0;
}
/************Output*********
```

```
Enter size of an Array
10
Enter your choice. 1.insertion 2.search 3.display 4.exit
1
Enter your data one by one
15
5
Enter your choice. 1.insertion 2.search 3.display 4.exit
1
Enter your data one by one
25
5
Enter your choice. 1.insertion 2.search 3.display 4.exit
1
Enter your data one by one
19
9
Enter your choice. 1.insertion 2.search 3.display 4.exit
1
Enter your choice. 1.insertion 2.search 3.display 4.exit
1
Enter your data one by one
29
9
Enter your data one by one
29
9
Enter your choice. 1.insertion 2.search 3.display 4.exit
1
Enter your data one by one
40
6
```

```
Enter your choice. 1.insertion 2.search 3.display 4.exit
3
Given array is
29
40
0
0
15
25
0
0
19
```

*******/