

```
#include <stdio.h>
```

```
int main()
{
    int a[100]={1,2,1,4,5,4};
    int n=6,count,i,j;

    for(i=0;i<n;i++){
        count=0;
        for(j=0;j<n;j++){
            if(i!=j && a[i]==a[j]){
                count++;
                break;
            }

        }
        if(count==0){
            printf("%d",a[i]);
        }
    }
    return 0;
}
```

?. Write a program to print duplicate elements in an array

```
#include <stdio.h>
```

```
int main()
{
    int a[100]={1,2,1,4,5,4};
    int n=6,count,i,j;

    for(i=0;i<n;i++){
        count=0;
        for(j=0;j<n;j++){
            if(i!=j && a[i]==a[j]){
                count++;
                a[j]=-1;
            }

        }
        if(count==1 && a[i]!=-1){
            printf("%d",a[i]);
        }
    }
    return 0;
}
```

?. Print all prime numbers in an array

```
int main()
{

    int a[100]={2,9,7,5,4,10};
```

```

int n=6,flag=0,i,j;

for(i=0;i<n;i++){
    flag=0;
    for(j=2;j<a[i];j++){
        if(a[i]%j==0){
            flag=1;
            break;
        }
    }
    if(flag==0){
        printf("%d",a[i]);
    }
}

return 0;
}

```

6. Write a program to remove all the prime numbers in an array

```

#include <stdio.h>

int main()
{

    int a[100]={2,9,7,5,4,10};
    int n=6,flag,i,j;

    for(i=0;i<n;i++){
        flag=0;
        for(j=2;j<a[i];j++){
            if(a[i]%j==0){
                flag=1;
                break;
            }
        }
        if(flag==0){
            for(j=i;j<n;j++){
                a[j]=a[j+1];
            }
            n--;
            i--;
        }
    }
    for(i=0;i<n;i++){
        printf("%d ",a[i]);
    }
    return 0;
}

```

```
}
```

7. Program to find the average of n ($n < 10$) numbers using arrays

```
#include <stdio.h>
```

```
int main()
{
    int a[100];
    int n,i;
    float sum,avg;
    printf("Enter the number:");
    scanf("%d",&n);
    if(n<1||n>9){
        printf("Please enter number 1 to 9:");
        scanf("%d",&n);
    }
    for(i=0;i<n;i++){
        a[i]=i+1;
        sum=sum+a[i];
    }
    avg=sum/n;
    printf("Average of the number:%f",avg);

    return 0;
}
```

8. Program to find the average of n numbers using arrays

```
#include <stdio.h>
```

```
int main()
{
    int a[100];
    int n,i;
    float sum,avg;
    printf("Enter the number:");
    scanf("%d",&n);
    for(i=0;i<n;i++){
        a[i]=i+1;
        sum=sum+a[i];
    }
    avg=sum/n;
    printf("Average of the number is:%f",avg);

    return 0;
}
```