

ASSIGNMENT-14

Write a program to calculate the sum of numbers stored in an array of size 10. Take array values from the user.

```
#include<stdio.h>
int main()
{
    int arr[10];
    int sum=0;
    printf("Enter 10 elements : ");
    for(int i=0; i<=9; i++)
    {
        scanf("%d",&arr[i]);
        sum+=arr[i];
    }
    printf("Sum of elements of array : %d",sum);
    printf("\n");
    return 0;
}
```

Write a program to calculate the average of numbers stored in an array of size 10. Take array values from the user.

```
#include<stdio.h>
int main()
{
    int arr[10];
    float sum=0;
    printf("Enter 10 elements : ");
    for(int i=0; i<=9; i++)
    {
        scanf("%d",&arr[i]);
        sum+=arr[i];
    }
    printf("Average of elements stored in an array : %.1f",sum/10);
    printf("\n");
    return 0;
}
```

Write a program to calculate the sum of all even numbers and sum of all odd numbers, which are stored in an array of size 10. Take array values from the user.

```
#include<stdio.h>
int main()
{
    int arr[10];
```

```

float sume=0,sumo=0;
printf("Enter 10 elements : ");
for(int i=0; i<=9; i++)
{
    scanf("%d",&arr[i]);
    if(arr[i]%2==0)
        sume+=arr[i];
    else
        sumo+=arr[i];
}
printf("Sum of even no. stored in an array : %.1f",sume);
printf("\nSum of even no. stored in an array : %.1f",sumo);
printf("\n");
return 0;
}

```

Write a program to find the greatest number stored in an array of size 10. Take array values from the user.

```

#include<stdio.h>
int main()
{
    int arr[10];
    int max=0,prev;
    printf("Enter 10 elements in an array : ");
    for(int i=0; i<10; i++)
    {
        scanf("%d",&arr[i]);

    }
    max=arr[0];
    for(int i=1; i<10; i++)
    {
        if(max<=arr[i])
        {
            max=arr[i];
        }
    }
    printf("Greatest no. stored in an array : %d",max);
    printf("\n");
    return 0;
}

```

Write a program to find the smallest number stored in an array of size 10. Take array values from the user.

```

#include<stdio.h>
int main()

```

```

{
    int arr[10];
    int max=0,prev;
    printf("Enter 10 elements in an array : ");
    for(int i=0; i<10; i++)
    {
        scanf("%d",&arr[i]);

    }
    max=arr[0];
    for(int i=1; i<10; i++)
    {
        if(max>=arr[i])
        {
            max=arr[i];
        }
    }
    printf("Smallest no. stored in an array : %d",max);
    printf("\n");
    return 0;
}

```

Write a program to sort elements of an array of size 10. Take array values from the user.

```

#include<stdio.h>
int main()
{
    int arr[10];

    printf("Enter 10 elements in an array : ");
    for(int i=0; i<10; i++)
    {
        scanf("%d",&arr[i]);
    }
    for(int i=0; i<10; i++)
    {
        for(int j=i+1; j<10; j++)
        {
            if(arr[i]>= arr[j])
            {
                int temp=arr[j];
                arr[j]=arr[i];
                arr[i]=temp;
            }
        }
    }
    printf("After sorting an array : \n");
}

```

```

    for(int i=0; i<10; i++)
    {
        printf("%d ",arr[i]);
    }
    printf("\n");
    return 0;
}

```

Write a program to find second largest in an array. Take array values from the user.

```

#include<stdio.h>
int main()
{
    int arr[10];
    int large=0, slarge=0;
    printf("Enter 10 elements in an array : ");
    for(int i=0; i<10; i++)
    {
        scanf("%d",&arr[i]);
    }
    for(int i=0; i<10; i++)
    {
        if(arr[i]>large)
        {
            slarge=large;
            large=arr[i];
        }
        if(large>arr[i] && slarge<arr[i])
        {
            slarge=arr[i];
        }
    }
    printf("second largest element of an array : %d",slarge);
    printf("\n");
    return 0;
}

```

Write a program to find the second smallest number in an array. Take array values from the user.

```

#include<stdio.h>
int main()
{
    int arr[10];
    printf("Enter 10 elements in an array : ");
    for(int i=0; i<10; i++)
    {

```

```

        scanf("%d",&arr[i]);
    }
    int large=arr[0], slarge;
    for(int i=1; i<10; i++)
    {
        if(arr[i]<large)
        {
            slarge=large;
            large=arr[i];
        }
        if(large<arr[i] && slarge>arr[i])
        {
            slarge=arr[i];
        }
    }
    printf("second smallest element of an array : %d",slarge);
    printf("\n");
    return 0;
}

```

Write a program in C to read n number of values in an array and display it in reverse order. Take array values from the user.

```

#include<stdio.h>
int main()
{
    int n;
    printf("Enter value of n : ");
    scanf("%d",&n);
    int arr[n];
    printf("Enter %d elements in an array : ",n);
    for(int i=0; i<n; i++)
    {
        scanf("%d",&arr[i]);
    }
    printf("print aarray in reverse order : \n");
    for(int i=n-1; i>=0; i--)
    {
        printf("%d ",arr[i]);
    }
    printf("\n");
    return 0;
}

```

Write a program in C to copy the elements of one array into another array. Take array values from the user.

```

#include<stdio.h>

```

```
int main()
{
    int n;
    printf("Enter value of n : ");
    scanf("%d",&n);
    int arr[n],a[n];
    printf("Enter %d elements in an array : ",n);
    for(int i=0; i<n; i++)
    {
        scanf("%d",&arr[i]);
    }
    for(int i=0; i<n; i++)
    {
        a[i]=arr[i];
        printf("%d ",a[i]);
    }
    printf("\n");
    return 0;
}
```