

## ASSIGNMENT-1\*

1. 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 i, sum = 0, a[10];
```

```
    printf("Enter 10 numbers: ");
```

```
    for (i = 0; i <= 9; i++)
```

```
    {
```

```
        scanf("%d", a[i]);
```

```
    }
```

```
    for (i = 0; i <= 9; i++)
```

```
        sum = sum + a[i];
```

```
    printf("sum is: %d", sum);
```

```
    return 0;
```

```
}
```

2. 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 i, a[10], sum = 0;
```

```
    float avg;
```

```
    printf("Enter 10 Numbers: ");
```

```
    sum = for (i = 0; i <= 9; i++)
```

```
    {
```

```
        scanf("%d", a[i]);
```

```
        sum = sum + a[i];
```

```
    }
```

```
    avg = sum / 10.0;
```

```
    printf("Average is: %.f", avg);
```

```
    return 0;
```

```
}
```

3. 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 i, a[10], sum of even = 0, sum of odd = 0;
    printf("Enter 10 Numbers");
    for (i = 0; i <= 9; i++)
    {
        scanf("%d", &a[i]);
        if (a[i] % 2 == 0)
            sum of even = sum of even + a[i];
        else
            sum of odd = sum of odd + a[i];
    }
    printf("Sum of even number is : %d\n", sum of even);
    printf("Sum of odd Number is : %d\n", sum of odd);
    return 0;
}
```

4. 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 i, a[10], max = 1, // let max = 1
    printf("Enter 10 Numbers:");
    for (i = 0; i <= 9; i++)
    {
        scanf("%d", &a[i]);
        if (a[i] > max)
            max = a[i];
    }
    printf("Greatest number is %d", max);
    return 0;
}
```



5. Write a Program to find Smallest number stored in an array of size 10. Take array values from the user.

```
#include <stdio.h>
int main()
{
    int i, a[10],
    printf("Enter two number");
    for(i=0; i<=9; i++)
    {
        scanf("%d", &a[i]);
        if(a[i]<min)
            min = a[i];
    }
    printf("Smallest number is %d", min);
    return 0;
}
```

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

```
#include <stdio.h>
int main()
{
    int i, j, a[10], min;
    printf("Enter 10 Number:");
    for(i=0; i<=9; i++)
    {
        scanf("%d", &a[i]);
    }
    for(i=0; i<9; i++)
    {
        for(j=1; j<10; j++)
        {
            if(a[i]>a[j])
            {
                min = a[j];
                a[i] = a[j];
                a[j] = min;
            }
        }
    }
}
```

```

    }
}
for (i=0; i<=9; i++)
{
    printf("%d", a[i]);
}
return 0;
}

```

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

```

#include <stdio.h>
int main ()
{
    int i, a[10], large, S-large;
    printf("Enter 10 Number:");
    for (i=0; i<=9; i++)
    {
        scanf("%d", &a[i]);
    }
    for (i=0; i<=9; i++)
    {
        if (a[i] > large)
            large = a[i+1];
    }
    printf("%d", large);
    return 0;
}

```

8. Write a Program to find second smallest number in an array. Take array values from user.



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

```
int main()
```

```
{
```

```
int i, a[10], small;
```

```
printf("Enter 10 Numbers:");
```

```
for (i=0; i<=9; i++)
```

```
{
```

```
scanf("%d", &a[i]);
```

```
}
```

```
for (i=9; i>=0; i--)
```

```
{
```

```
if (a[i] < small)
```

```
small = a[i+1];
```

```
}
```

```
printf("second smallest number is: %d", small);
```

```
return 0;
```

```
}
```

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

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

```
int main()
```

```
{
```

```
int i, a[10];
```

```
printf("Enter 10 Numbers: \n");
```

```
for (i=0; i<=9; i++)
```

```
{
```

```
scanf("%d", &a[i]);
```

```
}
```

```
for (i=9; i>=0; i--)
```

```
{
```

```
printf("%d", a[i]);
```

```
}
```

```
return 0;
```

```
}
```

10. 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 i, a[10], b[10];
    printf("Enter 10 Numbers:");
    for (i=0; i<=9; i++)
    {
        scanf("%d", &a[i]);
        b[i] = a[i];
        printf("%d", b[i]);
    }
    return 0;
}
```