

SUM and Average

```
#include<stdio.h>

#define n 5

int main()
{
    int a[n],i,sum=0,avg,count=0;
    printf("array value");
    for(i=1;i<n;i++)
    {
        scanf("%d",&a[i]);
    }
    printf("\n values");

    for(i=1;i<n;i++)
    {
        sum=sum+i;
        count=count+1;
    }
    printf("sum=%d",sum);
    avg=sum/count;
    printf("avg=%d",avg);
    return 0;
}
```

REVERSE STRING

```
#include<stdio.h>

#define N 20

int main()
{
    char a[N],b[N];
    int i,j;
    printf("enter a char");
    gets(a);
    puts("value: \n");
    for(i=0;i!='\0';i++);
    for(i=j;i>=0;i--)
    {
        b[j]=a[i-1];
        j++;
    }
    printf("%d",b[j]);

    return 0;
}
```

PRINTF VALUE IN ARRAY

```
#include<stdio.h>

#define N 5
```

```

int main()
{
    int a[N],i;
    printf("array value");
    for(i=0;i<N;i++)
    {
        scanf("%d",a[N]);
    }
    for(i=0;i<N;i++)
    {
        printf("%d\t",a[i]);
    }
    return 0;
}

```

// C program to store temperature of two cities of a week and display it.

```

#include <stdio.h>
const int CITY = 2;
const int WEEK = 7;
int main()
{
    int temperature[CITY][WEEK];

    // Using nested loop to store values in a 2d array
    for (int i = 0; i < CITY; ++i)
    {
        for (int j = 0; j < WEEK; ++j)
        {
            printf("City %d, Day %d: ", i + 1, j + 1);
            scanf("%d", &temperature[i][j]);
        }
    }
    printf("\nDisplaying values: \n\n");
}

```

```

// Using nested loop to display vlues of a 2d array
for (int i = 0; i < CITY; ++i)
{
    for (int j = 0; j < WEEK; ++j)
    {
        printf("City %d, Day %d = %d\n", i + 1, j + 1, temperature[i][j]);
    }
}
return 0;
}

```

// C program to find the sum of two matrices of order 2*2

```

#include <stdio.h>
int main()
{
    float a[2][2], b[2][2], result[2][2];

    // Taking input using nested for loop
    printf("Enter elements of 1st matrix\n");
    for (int i = 0; i < 2; ++i)
        for (int j = 0; j < 2; ++j)
        {
            printf("Enter a%d%d: ", i + 1, j + 1);
            scanf("%f", &a[i][j]);
        }

    // Taking input using nested for loop
    printf("Enter elements of 2nd matrix\n");
    for (int i = 0; i < 2; ++i)
        for (int j = 0; j < 2; ++j)
        {
            printf("Enter b%d%d: ", i + 1, j + 1);
            scanf("%f", &b[i][j]);
        }

    // adding corresponding elements of two arrays

```

```

for (int i = 0; i < 2; ++i)
    for (int j = 0; j < 2; ++j)
    {
        result[i][j] = a[i][j] + b[i][j];
    }

// Displaying the sum
printf("\nSum Of Matrix:");

for (int i = 0; i < 2; ++i)
    for (int j = 0; j < 2; ++j)
    {
        printf("%.1f\t", result[i][j]);

        if (j == 1)
            printf("\n");
    }
return 0;
}

```

// C Program to store and print 12 values entered by the user

```

#include <stdio.h>
int main()
{
    int test[2][3][2];

    printf("Enter 12 values: \n");

    for (int i = 0; i < 2; ++i)
    {
        for (int j = 0; j < 3; ++j)
        {
            for (int k = 0; k < 2; ++k)
            {
                scanf("%d", &test[i][j][k]);
            }
        }
    }
}

```

```

}

// Printing values with the proper index.

printf("\nDisplaying values:\n");
for (int i = 0; i < 2; ++i)
{
    for (int j = 0; j < 3; ++j)
    {
        for (int k = 0; k < 2; ++k)
        {
            printf("test[%d][%d][%d] = %d\n", i, j, k, test[i][j][k]);
        }
    }
}

return 0;
}

```

// Program to calculate the sum of array elements by passing to a function

```

#include <stdio.h>
float calculateSum(float num[]);

int main() {
    float result, num[] = {23.4, 55, 22.6, 3, 40.5, 18};

    // num array is passed to calculateSum()
    result = calculateSum(num);
    printf("Result = %.2f", result);
    return 0;
}

float calculateSum(float num[]) {
    float sum = 0.0;

    for (int i = 0; i < 6; ++i) {

```

```
    sum += num[i];  
}  
  
return sum;  
}
```