```c
#include <stdio.h>

int main() {
    int n, sum = 0;

    printf("Enter the number of elements in the array: ");
    scanf("%d", &n);

    int arr[n];


    printf("Enter %d elements:\n", n);
    for (int i = 0; i < n; i++) {
        scanf("%d", &arr[i]);
    }
    int *ptr = arr;
   for(int i=0; i<n; i++)
    {
        sum += *(ptr + i);
    }


    printf("Sum of elements: %d\n", sum);

    return 0;
}
```

```
Enter the number of rows: 2
Enter the number of columns: 3
Enter the elements of the matrix:
3 4 5 6 2 7
The entered matrix is:
3   4   5
6   2   7
```

```c
#include <stdio.h>

int main()
{

    int x, y, *a, *b, temp;


    printf("Enter the value of x and y\n");
    scanf("%d%d", &x, &y);

    a = &x;
```

```
    b = &y;


    temp = *b;
    *b = *a;
    *a = temp;


    printf("After Swapping\nx = %d\ny = %d\n", x, y);

    return 0;
}
```

```
Enter the value of x and y
43 53
After Swapping
x = 53
y = 43
```

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

int main() {
  char name[] = "harshita";
  char *ptr = name;
  int L = strlen(ptr);
  int i;

  printf("length=%d\n", L);

  for (i = 1; i <= L; i++) {
    printf("%c", *(ptr + L - i));
  }

  return 0;
}
```

```
length=8
atihsrah
```

```
#include <stdio.h>

void power(int *x, int *y, int **result);

int main() {
    int x, y, *result_ptr;

    printf("Enter the values of x and y: ");
```

```
    scanf("%d %d", &x, &y);

    power(&x, &y, &result_ptr);
    printf("Result: %d\n", *result_ptr);

    return 0;
}

void power(int *a, int *b, int **result) {
    int count = 1;

    for (int i = 1; i <= *b; i++) {
        count *= *a;
    }

    *result = &count;
}
```

```
Enter the values of x and y: 4 5
Result: 1024
```

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

int main() {
    int rows,cols;
    printf("Enter the number of rows: ");
    scanf("%d", &rows);

    printf("Enter the number of columns: ");
    scanf("%d", &cols);

    int **matrix = (int **)malloc(rows * sizeof(int *));
    for (int i = 0; i < rows; i++) {
        matrix[i] = (int *)malloc(cols * sizeof(int));
  }
    printf("Enter the elements of the matrix:\n");
    for (int i = 0; i < rows; i++) {
        for (int j = 0; j < cols; j++) {
            scanf("%d", &matrix[i][j]);
        }
    }


    printf("The entered matrix is:\n");
    for (int i = 0; i < rows; i++) {
```

```
        for (int j = 0; j < cols; j++) {
            printf("%d\t", matrix[i][j]);
        }
        printf("\n");
    }

    for (int i = 0; i < rows; i++) {
        free(matrix[i]);
    }
    free(matrix);

    return 0;
}
```

```
Enter the number of rows: 2
Enter the number of columns: 3
Enter the elements of the matrix:
3 4 5 6 2 7
The entered matrix is:
3   4   5
6   2   7
```