```
#include <stdio.h>
int main()
{
    char *str,
        str = "%s";
    printf(str, "K\n");
    return 0;
}
```

Program 2

```
#include <stdio.h>
int main()
{
    printf("%d\n", sizeof("*"));
    return 0;
}
```

Program 3

```
#include <stdio.h>
int main()
{
    char *str;
    str = "%d\n";
    str++;
    str++;
    printf(str - 2, 300);
    return 0;
}
```

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

```
int main()
{
   int ival;
   char cval;
   void *ptr;

   ival = 50;
   cval = 65;
   ptr = &ival;
   printf("value=%d,size=%d\n", *(int)ptr, sizeof(ptr));
   ptr = &cval;
   printf("value=%d,size=%d\n", *(char)ptr, sizeof(ptr));
   return 0;
}
```

```
#include <stdio.h>
int main()
{
    void *ptr;
    ++ptr;
    printf("%u", ptr);
    return 0;
}
```

```
#include <stdio.h>
int main()
{
    char ch = 10;
    void *ptr = &ch;
    printf("%d,%d", *(char *)ptr, ++(*(char *)ptr));
    return 0;
}
```

```
#include <stdio.h>
int main()
{
    char ch = 'c';
    char *chptr = &ch;
    int i = 20;
    int *intptr = &i;
    float f = 1.20000;
    float *fptr = &f;
    char *ptr = "I am a string";
    printf("[%c], [%d], [%f], [%c], [%s\n", *chptr, *intptr, *fptr, *ptr,
ptr);
    return 0;
}
```

Program 8

```
#include <stdio.h>
int main() {
   int i = 10;
   int j = &i;
   printf("%d %d\n", i, j);
   return 0;
}
```

```
#include <stdio.h>
int main() {
   float a = 3.14;
   char *j;
   j = (char *)&a;
   printf("%d\n", *j);
   return 0;
```

}

Program 10

```
#include <stdio.h>
int main() {
    int x = 30, *y, *z;
    y = &x;
    z = y;
    *y++ = *z++;
    x++;
    printf("x=%d, y=%d, z=%d\n", x, y, z);
    return 0;
}
```

Program 11

```
#include <stdio.h>
int main() {
    char *str;
    str = "%s";
    printf(str, "K\n");
    return 0;
}
```

```
#include <stdio.h>
int main() {
    printf("%d\n", sizeof("*"));
```

```
return 0;
}
```

```
#include <stdio.h>
int main() {
    char *str;
    str = "%d\n";
    str++;
    str++;
    printf(str - 2, 300);
    return 0;
}
```

```
#include <stdio.h>
int main() {
   int ival;
   char cval;
   void *ptr;

   ival = 50;
   cval = 65;
   ptr = &ival;
   printf("value=%d,size=%d\n", *(int *)ptr, sizeof(ptr));
   ptr = &cval;
   printf("value=%d,size=%d\n", *(char *)ptr, sizeof(ptr));
```

```
return 0;
}
```

```
#include <stdio.h>
int main() {
   void *ptr;
   ++ptr;
   printf("%u", ptr);
   return 0;
}
```

Program 16

```
#include <stdio.h>
int main() {
    char ch = 10;
    void *ptr = &ch;
    printf("%d,%d", *(char *)ptr, ++(*(char *)ptr));
    return 0;
}
```

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

```
int main() {
    char ch = 'c';
    char *chptr = &ch;
    int i = 20;
    int *intptr = &i;
    float f = 1.20000;
    float *fptr = &f;
    char *ptr = "I am a string";
    printf("[%c], [%d], [%f], [%c], [%s]\n", *chptr, *intptr, *fptr, *ptr,
ptr);
    return 0;
}
```

```
#include <stdio.h>
int main() {
    char *ptr = NULL;
    printf("%s", ptr);
    return 0;
}
```

```
#include <stdio.h>
int main() {
   int *ptr, b;
   b = sizeof(ptr);
   printf("%d", b);
   return 0;
}
```

```
#include <stdio.h>
int main() {
    int a = 25, b;
    int *ptr, *ptr1;
    ptr = &a;
    ptr1 = &b;
    b = 36;
    printf("%d %d", *ptr, *ptr1);
    return 0;
}
```

Program 21

```
#include <stdio.h>
int main() {
   int *ptr = 2;
   printf("%d", sizeof(ptr));
   return 0;
}
```

```
#include <stdio.h>
int main() {
   int *ptr;
   *ptr = 5;
   printf("%d", *ptr);
   return 0;
```

```
}
```

```
#include <stdio.h>
int main() {
    int a = 36;
    int *ptr;
    ptr = &a;
    printf("%u %u", * &ptr, &*ptr);
    return 0;
}
```

Program 24

```
#include <stdio.h>
int main() {
    printf("%d", sizeof(void *));
    return 0;
}
```

```
#include <stdio.h>
int main() {
    int a = 10, b = 6;
    int *ptr;
    ptr = &b;
    printf("%d", *ptr + 1);
    return 0;
}
```

```
#include <stdio.h>
int main() {
    char *ptr = "Pointer-to-String", i;
    printf("%s", ++ptr);
    return 0;
}
```

Program 27

```
#include <stdio.h>
#include <string.h>
int main() {
    char *str = "His";
    int i;
    for (i = 0; i < strlen(str); i++)
        printf("%s", str++);
    return 0;
}</pre>
```

```
#include <stdio.h>
int main()
```

```
{
    char *str = "His";
    int i;
    for (i = 0; i < strlen(str); i++)
        printf("%s", str++);
    return 0;
}</pre>
```

```
#include <stdio.h>
int main()
{
    char *ptr = "Pointer-to-String", i;
    printf("%s", ++ptr);
    return 0;
}
```

Program 30

```
#include <stdio.h>
int main()
{
    int a = 10, b = 6;
    int *ptr;
    ptr = &b;
    printf("%d", *ptr + 1);
    return 0;
}
```

```
#include <stdio.h>
int main()
{
   int i = 6, *j, k;
```

```
j = &i;
printf("%d\n", i * *j * i + *j);
return 0;
```

```
#include <stdio.h>
int main()
{
    int a = 5;
    int *ptr;
    ptr = &a;
    *ptr = *ptr * 3;
    printf("%d", a);
    return 0;
}
```

Program 33

```
#include <stdio.h>
int main() {
   int i = 6, *j, k;
   j = &i;
   printf("%d\n", i * *j * i + *j);
   return 0;
}
```

```
#include <stdio.h>
int main() {
   int x = 20, *y, *z;
   y = &x;
   z = y;
```

```
*y++;
*z++;
x++;
printf("x = %d, y = %d, z = %d\n", x, *y, *z);
return 0;
}
```

```
#include <stdio.h>
int main() {
   int a = 5;
   int *ptr;
   ptr = &a;
   *ptr = *ptr * 3;
   printf("%d", a);
   return 0;
}
```

```
#include <stdio.h>
int main() {
   int i = 6, *j, k;
   j = &i;
   k = *j + 2;
   printf("%d\n", k);
   return 0;
}
```

```
#include <stdio.h>
int main() {
    int a[5] = {1, 2, 3, 4, 5};
    int *ptr = a;
    for (int i = 0; i < 5; i++) {
        printf("%d ", *ptr);
        ptr++;
    }
    return 0;
}</pre>
```

Program 38

```
#include <stdio.h>
int main() {
   int arr[] = {1, 2, 3, 4, 5};
   int *ptr = arr + 2;
   printf("%d\n", *ptr);
   return 0;
}
```

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

```
int main() {
    int a = 10;
    int *ptr1 = &a;
    int **ptr2 = &ptr1;
    printf("%d\n", **ptr2);
    return 0;
}
```

```
#include <stdio.h>
int main() {
    char str[] = "Hello";
    char *ptr = str;
    while (*ptr != '\0') {
        printf("%c ", *ptr);
        ptr++;
    }
    return 0;
}
```

```
#include <stdio.h>
int main() {
   int a = 42;
   int *ptr = &a;
   *ptr += 8;
   printf("%d\n", a);
   return 0;
}
```

```
#include <stdio.h>
int main() {
   int a = 5, b = 10;
   int *ptr1 = &a, *ptr2 = &b;
   int sum = *ptr1 + *ptr2;
   printf("Sum: %d\n", sum);
   return 0;
}
```

```
#include <stdio.h>
int main() {
    int arr[] = {1, 2, 3, 4, 5};
    int *ptr = arr;
    printf("Array elements: ");
    for (int i = 0; i < 5; i++) {
        printf("%d ", *ptr);
        ptr++;
    }
    printf("\n");
    return 0;
}</pre>
```

```
#include <stdio.h>
int main() {
    int a = 42;
    int *ptr1 = &a;
    int **ptr2 = &ptr1;
    int **ptr3 = &ptr2;
    printf("%d\n", ***ptr3);
    return 0;
}
```

Program 45

```
#include <stdio.h>
int main() {
   int a = 5;
   int *ptr = &a;
   printf("Address of a: %p\n", ptr);
   return 0;
}
```

```
#include <stdio.h>
int main() {
   int a = 5;
   int *ptr = &a;
   printf("Value of a: %d\n", *ptr);
   return 0;
}
```

```
#include <stdio.h>
int main() {
   int a = 5;
   int *ptr = &a;
   *ptr = 10;
   printf("Modified value of a: %d\n", a);
   return 0;
}
```

Program 48

```
#include <stdio.h>
int main() {
   int a = 5, b = 10;
   int *ptr1 = &a, *ptr2 = &b;
    *ptr1 += *ptr2;
   printf("Updated value of a: %d\n", a);
   return 0;
}
```

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

```
int main() {
   int a = 5, b = 10;
   int *ptr1 = &a, *ptr2 = &b;
   int sum = *ptr1 + *ptr2;
   printf("Sum: %d\n", sum);
   return 0;
}
```

```
#include <stdio.h>
int main() {
   int a = 5;
   int *ptr1 = &a;
   int **ptr2 = &ptr1;
   int **ptr3 = &ptr2;
   printf("Value of a: %d\n", ***ptr3);
   return 0;
}
```

```
#include <stdio.h>
int main() {
   int a = 42;
   int *ptr = &a;
   printf("Address of a: %p\n", ptr);
   return 0;
}
```

```
#include <stdio.h>
int main() {
   int a = 42;
   int *ptr = &a;
   printf("Value of a: %d\n", *ptr);
   return 0;
}
```

Program 53

```
#include <stdio.h>
int main() {
   int a = 42;
   int *ptr = &a;
   *ptr = 8;
   printf("Modified value of a: %d\n", a);
   return 0;
}
```

```
#include <stdio.h>
int main() {
   int a = 5, b = 10;
   int *ptr1 = &a, *ptr2 = &b;
   *ptr1 += *ptr2;
   printf("Updated value of a: %d\n", a);
   return 0;
```

}

Program 55

```
#include <stdio.h>
int main() {
   int a = 5, b = 10;
   int *ptr1 = &a, *ptr2 = &b;
   int sum = *ptr1 + *ptr2;
   printf("Sum: %d\n", sum);
   return 0;
}
```

Program 56

```
#include <stdio.h>
int main() {
    int a = 5;
    int *ptr1 = &a;
    int **ptr2 = &ptr1;
    int **ptr3 = &ptr2;
    printf("Value of a: %d\n", ***ptr3);
    return 0;
}
```

Program 57

#include <stdio.h>

```
int main() {
    int a = 5, b = 10;
    int *ptr = &a;
    printf("Value of a: %d, Value of b: %d\n", *ptr, b);
    return 0;
}
```

```
#include <stdio.h>
int main() {
   int arr[] = {1, 2, 3, 4, 5};
   int *ptr = arr;
   printf("First element: %d\n", *ptr);
   return 0;
}
```

Program 59

```
#include <stdio.h>
int main() {
   int arr[] = {1, 2, 3, 4, 5};
   int *ptr = arr + 2;
   printf("Third element: %d\n", *ptr);
   return 0;
}
```

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

```
int main() {
    int arr[] = {1, 2, 3, 4, 5};
    int *ptr = arr;
    for (int i = 0; i < 5; i++) {
        printf("%d ", *ptr);
        ptr++;
    }
    printf("\n");
    return 0;
}</pre>
```

```
#include <stdio.h>
int main() {
    int arr[] = {1, 2, 3, 4, 5};
    int *ptr = arr;
    printf("Array elements: ");
    for (int i = 0; i < 5; i++) {
        printf("%d ", *ptr);
        ptr++;
    }
    printf("\n");
    return 0;
}</pre>
```

```
#include <stdio.h>
int main() {
   int a = 5, b = 10;
```

```
int *ptr = &a;
printf("Address of a: %p, Address of b: %p\n", ptr, &b);
return 0;
}
```

```
#include <stdio.h>
int main() {
   int a = 5, b = 10;
   int *ptr = &a;
   printf("Value of a: %d, Address of b: %p\n", *ptr, &b);
   return 0;
}
```

Program 64

```
#include <stdio.h>
int main() {
   int a = 5, b = 10;
   int *ptr1 = &a, *ptr2 = &b;
   printf("Value of a: %d, Value of b: %d\n", *ptr1, *ptr2);
   return 0;
}
```

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

```
int main() {
   int a = 5;
   int *ptr = &a;
   printf("Value of a: %d, Value of a through pointer: %d\n", a, *ptr);
   return 0;
}
```

```
#include <stdio.h>
int main() {
   int a = 5, b = 10;
   int *ptr = &a;
   *ptr = b;
   printf("Value of a: %d\n", a);
   return 0;
}
```

```
#include <stdio.h>
int main() {
    int arr[] = {1, 2, 3, 4, 5};
    int *ptr = arr;
    printf("Array elements: ");
    for (int i = 0; i < 5; i++) {
        printf("%d ", *ptr);
        ptr++;
    }
    printf("\n");
    return 0;
}</pre>
```

```
#include <stdio.h>
int main() {
   int arr[] = {1, 2, 3, 4, 5};
   int *ptr = &arr[2];
   printf("Third element: %d\n", *ptr);
   return 0;
}
```

Program 69

```
#include <stdio.h>
int main() {
   int arr[] = {1, 2, 3, 4, 5};
   int *ptr = arr + 3;
   printf("Fourth element: %d\n", *ptr);
   return 0;
}
```

```
#include <stdio.h>
int main() {
   int arr[] = {1, 2, 3, 4, 5};
   int *ptr = arr;
   while (*ptr != 3) {
      ptr++;
```

```
}
printf("Found 3 at index %ld\n", ptr - arr);
return 0;
}
```

```
#include <stdio.h>
int main() {
   int arr[] = {1, 2, 3, 4, 5};
   int *ptr = arr;
   int sum = 0;
   for (int i = 0; i < 5; i++) {
       sum += *ptr;
       ptr++;
   }
   printf("Sum of array elements: %d\n", sum);
   return 0;
}</pre>
```

```
#include <stdio.h>
int main() {
   int a = 5, b = 10;
   int *ptr = &a;
   printf("Address of a: %p, Value of a: %d\n", ptr, *ptr);
   return 0;
}
```

```
#include <stdio.h>
int main() {
   int a = 5, b = 10;
   int *ptr1 = &a, *ptr2 = &b;
   printf("Address of a: %p, Address of b: %p\n", ptr1, ptr2);
   return 0;
}
```

Program 74

```
#include <stdio.h>
int main() {
   int a = 5, b = 10;
   int *ptr1 = &a, *ptr2 = &b;
   printf("Value of a: %d, Value of b: %d\n", *ptr1, *ptr2);
   return 0;
}
```

```
#include <stdio.h>
int main() {
   int a = 5, b = 10;
   int *ptr1 = &a, *ptr2 = &b;
   int sum = *ptr1 + *ptr2;
   printf("Sum: %d\n", sum);
   return 0;
```

```
}
```

```
#include <stdio.h>
int main() {
   int a = 5, b = 10;
   int *ptr1 = &a, *ptr2 = &b;
   *ptr1 += *ptr2;
   printf("Updated value of a: %d\n", a);
   return 0;
}
```

```
#include <stdio.h>
int main() {
    int arr[] = {1, 2, 3, 4, 5};
    int *ptr = arr;
    int product = 1;
    for (int i = 0; i < 5; i++) {
        product *= *ptr;
        ptr++;
    }
    printf("Product of array elements: %d\n", product);
    return 0;
}</pre>
```

```
#include <stdio.h>
int main() {
   int a = 5;
   int *ptr = &a;
   printf("Value of a: %d, Value of a through pointer: %d\n", a, *ptr);
```

Program 79

```
#include <stdio.h>
int main() {
   int a = 5, b = 10;
   int *ptr = &a;
   *ptr = b;
   printf("Value of a: %d\n", a);
   return 0;
}
```

```
#include <stdio.h>
int main() {
    int arr[] = {1, 2, 3, 4, 5};
    int *ptr = arr;
    int sum = 0;
    for (int i = 0; i < 5; i++) {
        sum += *ptr;
        ptr++;
    }
    printf("Sum of array elements: %d\n", sum);</pre>
```

```
return 0;
}
```

```
#include <stdio.h>
int main() {
    char ch = 'A';
    char *ptr = &ch;
    *ptr = 'B';
    printf("Updated value of ch: %c\n", ch);
    return 0;
}
```

Program 82

```
#include <stdio.h>
int main() {
    int arr[] = {10, 20, 30, 40, 50};
    int *ptr = arr + 2;
    printf("Third element from the end: %d\n", *ptr);
    return 0;
}
```

```
#include <stdio.h>
int main() {
```

```
int arr[] = {1, 2, 3, 4, 5};
int *ptr = arr;
while (*ptr != 4) {
    ptr++;
}
printf("Found 4 at index %ld\n", ptr - arr);
return 0;
}
```

```
#include <stdio.h>
int main() {
    int a = 5, b = 10;
    int *ptr1 = &a, *ptr2 = &b;
    *ptr1 += *ptr2;
    *ptr2 = *ptr1 - *ptr2;
    printf("Value of a: %d, Value of b: %d\n", *ptr1, *ptr2);
    return 0;
}
```

```
#include <stdio.h>
int main() {
   int a = 5;
   int *ptr = &a;
   (*ptr)++;
   printf("Updated value of a: %d\n", a);
   return 0;
}
```

```
#include <stdio.h>
int main() {
    char str[] = "Hello";
    char *ptr = str;
    printf("String: %s\n", ptr);
    return 0;
}
```

Program 87

```
#include <stdio.h>
int main() {
   int a = 10;
   int *ptr = &a;
   printf("Address of a: %p\n", ptr);
   return 0;
}
```

```
#include <stdio.h>
int main() {
   int arr[] = {1, 2, 3, 4, 5};
   int *ptr = arr + 4;
   printf("Last element: %d\n", *ptr);
   return 0;
```

}

Program 89

```
#include <stdio.h>
int main() {
   int a = 10, b = 20;
   int *ptr1 = &a, *ptr2 = &b;
   int sum = *ptr1 + *ptr2;
   printf("Sum: %d\n", sum);
   return 0;
}
```

```
#include <stdio.h>
int main() {
    int arr[5];
    int *ptr = arr;
    printf("Enter 5 integers: ");
    for (int i = 0; i < 5; i++) {
        scanf("%d", ptr);
        ptr++;
    }
    printf("Array elements: ");
    ptr = arr;
    for (int i = 0; i < 5; i++) {
        printf("%d ", *ptr);
        ptr++;
    }
    printf("\n");
    return 0;</pre>
```

}

Program 91

```
#include <stdio.h>
int main() {
   int a = 10;
   int *ptr = &a;
   printf("Value of a: %d, Address of a: %p\n", *ptr, ptr);
   return 0;
}
```

```
#include <stdio.h>
int main() {
    int arr[] = {1, 2, 3, 4, 5};
    int *ptr = arr;
    int max = *ptr;
    for (int i = 1; i < 5; i++) {
        if (*(ptr + i) > max) {
            max = *(ptr + i);
        }
    }
    printf("Maximum element: %d\n", max);
    return 0;
}
```

```
#include <stdio.h>
int main() {
   int a = 5, b = 10;
   int *ptr = &a;
   int **ptr2 = &ptr;
   printf("Value of a: %d, Value of a through double pointer: %d\n", a,

**ptr2);
   return 0;
}
```

Program 94

```
#include <stdio.h>
int main() {
    int a = 10, b = 20;
    int *ptr1 = &a, *ptr2 = &b;
    int temp = *ptr1;
    *ptr1 = *ptr2;
    *ptr2 = temp;
    printf("Value of a: %d, Value of b: %d\n", *ptr1, *ptr2);
    return 0;
}
```

```
#include <stdio.h>
int main() {
   int arr[] = {1, 2, 3, 4, 5};
   int *ptr = arr;
```

```
for (int i = 0; i < 5; i++) {
    printf("%d ", *ptr);
    ptr++;
}
printf("\n");
return 0;
}</pre>
```

```
#include <stdio.h>
int main() {
    int arr[] = {1, 2, 3, 4, 5};
    int *ptr = arr;
    int sum = 0;
    for (int i = 0; i < 5; i++) {
        sum += *ptr;
        ptr++;
    }
    printf("Sum of array elements: %d\n", sum);
    return 0;
}</pre>
```

```
#include <stdio.h>
int main() {
   int arr[] = {1, 2, 3, 4, 5};
   int *ptr = arr;
   int product = 1;
   for (int i = 0; i < 5; i++) {
      product *= *ptr;
   }
}</pre>
```

```
ptr++;
}
printf("Product of array elements: %d\n", product);
return 0;
}
```

```
#include <stdio.h>
int main() {
   int arr[] = {1, 2, 3, 4, 5};
   int *ptr = arr;
   int count = 0;
   while (*ptr != 4) {
      count++;
      ptr++;
   }
   printf("Number of elements before 4: %d\n", count);
   return 0;
}
```

```
#include <stdio.h>
int main() {
    char str[] = "Hello, World!";
    char *ptr = str;
    while (*ptr != '\0') {
        printf("%c\n", *ptr);
        ptr++;
    }
    return 0;
```

}

Program 100

```
#include <stdio.h>
int main() {
    int arr[] = {1, 2, 3, 4, 5};
    int *ptr = arr;
    while (*ptr != 3) {
        ptr++;
    }
    *ptr = 30;
    printf("Updated value at index 2: %d\n", arr[2]);
    return 0;
}
```

```
include <stdio.h>
int main() {
   int a = 10, b = 20;
   int *ptr = &a;
   printf("Value of a: %d, Value of b: %d\n", *ptr, b);
   return 0;
}
```

```
#include <stdio.h>
int main() {
    char *str = "C Programming";
    int count = 0;
    while (*str != '\0') {
        count++;
        str++;
    }
    printf("Length of the string: %d\n", count);
    return 0;
}
```

Program 103

```
#include <stdio.h>
int main() {
   int a = 10, b = 20;
   int *ptr1 = &a, *ptr2 = &b;
    *ptr1 += *ptr2;
   printf("Sum of a and b: %d\n", a);
   return 0;
}
```

```
#include <stdio.h>
int main() {
   char str1[] = "Hello";
   char str2[] = "World";
   char *ptr1 = str1, *ptr2 = str2;
```

```
while (*ptr1 != '\0') {
    ptr1++;
}
while (*ptr2 != '\0') {
    *ptr1 = *ptr2;
    ptr1++;
    ptr2++;
}
*ptr2+= '\0';
printf("Concatenated string: %s\n", str1);
return 0;
}
```

```
#include <stdio.h>
int main() {
    int a = 5, b = 10;
    int *ptr1 = &a, *ptr2 = &b;
    *ptr1 *= *ptr2;
    printf("Product of a and b: %d\n", a);
    return 0;
}
```

```
#include <stdio.h>
int main() {
   int arr[] = {1, 2, 3, 4, 5};
   int *ptr = arr;
   int min = *ptr;
   for (int i = 1; i < 5; i++) {</pre>
```

```
#include <stdio.h>
int main() {
    int a = 5, b = 10;
    int *ptr1 = &a, *ptr2 = &b;
    *ptr1 /= *ptr2;
    printf("Result of a divided by b: %d\n", a);
    return 0;
}
```

```
#include <stdio.h>
int main() {
   int a = 5;
   int *ptr = &a;
   printf("Address of a: %p\n", &a);
   printf("Address stored in ptr: %p\n", ptr);
   return 0;
}
```

```
#include <stdio.h>
int main() {
   int a = 5, b = 10, c = 15;
   int *ptr = &a;
   int **ptr2 = &ptr;
   printf("Value of a: %d, Value of a through double pointer: %d\n", a,

**ptr2);
   return 0;
}
```

Program 110

```
#include <stdio.h>
int main() {
   int arr[] = {10, 20, 30, 40, 50};
   int *ptr = arr + 3;
   printf("Fourth element from the beginning: %d\n", *ptr);
   return 0;
}
```

```
#include <stdio.h>
int main() {
   char str[] = "Hello, World!";
   char *ptr = str;
   int length = 0;
   while (*ptr != '\0') {
      length++;
```

```
ptr++;
}
printf("Length of the string: %d\n", length);
return 0;
}
```

```
#include <stdio.h>
int main() {
   int a = 10, b = 20;
   int *ptr1 = &a, *ptr2 = &b;
   int result = *ptr1 * *ptr2;
   printf("Result of a * b: %d\n", result);
   return 0;
}
```

```
#include <stdio.h>
int main() {
    int arr[] = {5, 10, 15, 20, 25};
    int *ptr = arr + 4;
    while (ptr >= arr) {
        printf("%d ", *ptr);
        ptr--;
    }
    printf("\n");
    return 0;
}
```

```
#include <stdio.h>
int main() {
    int a = 10, b = 20;
    int *ptr1 = &a, *ptr2 = &b;
    *ptr1 = *ptr1 + *ptr2;
    *ptr2 = *ptr1 - *ptr2;
    *ptr1 = *ptr1 - *ptr2;
    printf("Value of a: %d, Value of b: %d\n", a, b);
    return 0;
}
```

```
#include <stdio.h>
int main() {
    int arr[] = {2, 4, 6, 8, 10};
    int *ptr = arr;
    int sum = 0;
    for (int i = 0; i < 5; i++) {
        sum += *ptr;
        ptr++;
    }
    printf("Sum of even numbers in the array: %d\n", sum);
    return 0;
}</pre>
```

```
#include <stdio.h>
int main() {
    int arr[] = {1, 3, 5, 7, 9};
    int *ptr = arr;
    int product = 1;
    for (int i = 0; i < 5; i++) {
        product *= *ptr;
        ptr++;
    }
    printf("Product of odd numbers in the array: %d\n", product);
    return 0;
}</pre>
```

```
#include <stdio.h>
int main() {
    int a = 5, b = 10, c = 15;
    int *ptr1 = &a, *ptr2 = &b, *ptr3 = &c;
    if (*ptr1 > *ptr2 && *ptr1 > *ptr3) {
        printf("a is the largest: %d\n", *ptr1);
    } else if (*ptr2 > *ptr1 && *ptr2 > *ptr3) {
        printf("b is the largest: %d\n", *ptr2);
    } else {
        printf("c is the largest: %d\n", *ptr3);
    }
    return 0;
}
```

```
#include <stdio.h>
int main() {
    int arr[] = {1, 2, 3, 4, 5};
    int *ptr1 = arr;
    int *ptr2 = &arr[4];
    while (ptr1 < ptr2) {
        printf("%d %d ", *ptr1, *ptr2);
        ptr1++;
        ptr2--;
    }
    if (ptr1 == ptr2) {
        printf("%d", *ptr1);
    }
    printf("\n");
    return 0;
}</pre>
```

```
#include <stdio.h>
int main() {
    int a = 5, b = 10;
    int *ptr1 = &a, *ptr2 = &b;
    int temp = *ptr1;
    *ptr1 = *ptr2;
    *ptr2 = temp;
    printf("Value of a: %d, Value of b: %d\n", *ptr1, *ptr2);
    return 0;
}
```

```
#include <stdio.h>
int main() {
    int arr[] = {1, 2, 3, 4, 5};
    int *ptr = arr;
    int sum = 0;
    for (int i = 0; i < 5; i++) {
        sum += *ptr;
        ptr++;
    }
    printf("Sum of array elements: %d\n", sum);
    return 0;
}</pre>
```

```
#include <stdio.h>
int main() {
    int arr[] = {1, 2, 3, 4, 5};
    int *ptr = arr;
    int product = 1;
    for (int i = 0; i < 5; i++) {
        product *= *ptr;
        ptr++;
    }
    printf("Product of array elements: %d\n", product);
    return 0;
}</pre>
```

```
#include <stdio.h>
int main() {
    int arr[] = {1, 2, 3, 4, 5};
    int *ptr = arr;
    int count = 0;
    while (*ptr != 4) {
        count++;
        ptr++;
    }
    printf("Number of elements before 4: %d\n", count);
    return 0;
}
```

Program 123

```
#include <stdio.h>
int main() {
    char str[] = "Hello, World!";
    char *ptr = str;
    while (*ptr != '\0') {
        printf("%c\n", *ptr);
        ptr++;
    }
    return 0;
}
```

```
#include <stdio.h>
int main() {
    int arr[] = {1, 2, 3, 4, 5};
    int *ptr = arr;
    while (*ptr != 3) {
        ptr++;
    }
    *ptr = 30;
    printf("Updated value at index 2: %d\n", arr[2]);
    return 0;
}
```

```
#include <stdio.h>
int main() {
   int a = 10, b = 20;
   int *ptr = &a;
   printf("Value of a: %d, Value of b: %d\n", *ptr, b);
   return 0;
}
```

```
#include <stdio.h>
int main() {
    char *str = "C Programming";
    int count = 0;
    while (*str != '\0') {
        count++;
    }
}
```

```
str++;
}
printf("Length of the string: %d\n", count);
return 0;
}
```

```
#include <stdio.h>
int main() {
   int a = 10, b = 20;
   int *ptr1 = &a, *ptr2 = &b;
   *ptr1 += *ptr2;
   printf("Sum of a and b: %d\n", a);
   return 0;
}
```

^^^^^^^^^^^^^^^^^^