

```
/*
```

*Arrays and Pointer Arithmetic in C:*

*-Four arithmetic operations can be used on pointers:++,--,+,\_*

```
-int main()
```

```
{
```

```
char a='3';
```

```
char *a=&a;
```

```
printf("%d\n",ptr a);
```

```
ptr a++;
```

```
printf("%d\n",ptr a);
```

```
printf("%d\n",ptr a+2);
```

```
}
```

*-Arrays, by itself, without index subscripting, can be assigned to an integer pointer.*

```
-int arr[10];
```

```
arr[i]==*(arr+i)
```

*-If arr is a pointer to arr[0] then arr+i is a pointer to arr[i]*

```
*/
```

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

```
int main()
```

```
{  
  
int arr[] = {2, 7, 5, 90, 45};  
  
printf("Value at position 3 is %d\n", arr[3]);  
  
printf("Address of first element is %d\n", &arr[0]);  
  
printf("Address of first element is %d\n", arr);  
  
printf("Address of second element is %d\n", &arr[1]);  
  
printf("Address of second element is %d\n", arr + 1);  
  
printf("Value of first element is %d\n", *(&arr[0]));  
  
printf("Value of first element is %d\n", arr[0]);  
  
printf("Value of first element is %d\n", *(arr));  
  
printf("Value of second element is %d\n", *(&arr[1]));  
  
printf("Value of second element is %d\n", arr[1]);  
  
printf("Value of second element is %d\n", *(arr + 1));  
  
return 0;  
  
}
```