

```
//pointer and array
//1) &a[0]==a; 2) &a[i]==(a+i) 3) a[i]==*(a+i)
```

```
/*
#include <stdio.h>
int main()
{
    int a[]={10, 20, 30, 40, 50};
    int i;
    int* ptr;
    ptr=a;
    for(i=0;i<5;++i)
// printf("\n%d", a[i]);
//printf("\n%d", *(a+i));
//printf("\n%d", *(i+a));

printf("\n%d", *(ptr+i));

    return 0;
}*/
```

```
/*
#include <stdio.h>
int main(void)
{
    int a[] = {10, 12, 6, 7, 2};
    int i;
    int *p;
    p=a;
    int sum = 0;
    for(i=0; i<5; i++)
    {
        //sum += a[i];
        //sum+=p[i];
        //sum += *(a + i);
        //sum+=*(p+i);
    }
    printf("%d\n", sum);
    return 0;
} */
```

```
/*
#include <stdio.h>
int main(void)
{
    int a[] = {10, 12, 6, 7, 2};
    int i;
    int sum = 0;
    int *p;
    p = a;
    for(i=0; i<5; i++)
    {
```

```

sum += *p;
p++; }
printf("%d\n", sum);
return 0;
} */
//p++ is p=p+1=p+1*4(for pointer to int)//for example, ptr is
initialized to point
//to the float array element, arr[3]. ptr - 1 points
//to arr[2], and ptr + 1 points to arr[4].

```

//Access Array Elements Using Pointers

```

#include <stdio.h>
int main() {
    int a[5], i, data[5];
    int *x=a;
    printf("Enter 5 array elements:\n ");
    for (i = 0; i < 5; ++i)
        scanf("%d", x + i);

    printf("Elements in a[: \n");
    for (i = 0; i < 5; ++i){
        printf("%d\n", *(x+i));
    }

    return 0;
}

```

```

/*
#include<stdio.h>
void printNum(int p[], int size);
//void printNum(int [], int );

int main()
{
int a[4]={4,10,1,5};
printNum(a,4);
return 0;
}

void printNum(int ptr[], int len)

{
int i;
for(i=0; i <len ; i++ )
{
printf("(ptr+%d) = %d \n",i,*(ptr+i),i);
//printf("ptr[%d]= %d \n",i, ptr[i]);
}
}

```

```
}
}*/
```

```
/*
#include<stdio.h>
//void printNum(int *ptr, int len);
//void printNum(int *, int );
```

```
int main()
{
int a[4]={4,10,1,5};
printNum(a,4);
return 0;
}
```

```
void printNum(int *ptr,int len)
{
int i;
for(i=0; i <len ; i++ )
{
printf("(ptr+%d) = %d \n",i,*(ptr+i),i);
//printf("ptr[%d]= %d \n",i, ptr[i]);
}
}*/
```

```
/*
#include<stdio.h>
void fill_array(int* x, int, int);
int main(){
    int x[5],i;
    fill_array(x, 5, 1);
    for (i=0; i<5;i++){
        printf("%d", x[i]);
        printf("\n");}
    return 0;
}
```

```
void fill_array(int *list,int n, int in_val){
    int i;
    for (i=0;i<n;i++)
    {
        //    list [i]=in_val;
        *(list+i)=in_val;
    }
}

*/
```