Passing array into the function

Example: Parameter passed as a value

```
#include <stdio.h>

void swap (int a, int b)
{
  int temp;

  temp=a;
  a=b;
  b=temp;
}
```

```
main()
{
  int x,y;

  x=10;  y=15;
  printf("x=%d y=%d \n",x,y);
  swap(x,y);
  printf("x=%d y=%d \n",x,y);
}
```

Output:

```
x=10 y=15
x=10 y=15
```

Array Pass in Function	

Array pass in function	void display(int a[]);
	void main()
	{
	int a[5]={10,20,30,40,50};
	clrscr();
	display(a);
	getch();
	}

display(int a[]); // Prototype
display(a) // Call
	void display(int a[])
	{ int i;
	for(i=0;i<5;i++)
	printf(" %d",a[i]);
	}

```c
#include<stdio.h>

#define SIZE 5
int sumValue( int x[ ], int size );

int main( void )
{
int a[SIZE] = {1, 2, 3, 4, 5};
int total = 0;

total = sumValue( a, SIZE );   /* call sumValue( ); passing array a and SIZE */
printf("%d\n", total);
return 0;
}


int sumValue( int x[ ], int size )
{
int k, sum = 0;

for (k = 0; k < size; k++) {
   sum += x[k];
}
return sum;
}
```

The function prototype, function header and function calls should all agree in the number, type, and order of arguments and parameters, and in the type of return value.

Example: Square each element of array

```c
#include <stdio.h>
void square (int a[], int b);

main()
{
  int a[100], i, n;

  scanf ("%d", &n);
  for (i=0; i<n; i++)
    scanf ("%d", &a[i]);

  square (a, n);

  printf ("\nNew array is: ");
  for (i=0; i<n; i++)
    printf (" %d", a[i]);
}
```

```c
void square (x,size)
int x[], size;
{
  int i;

  for (i=0;i<size;i++)
     a[i] = a[i]*a[i];
        min = a[i];

  return;
}
```