**Programming with C Language**

**Tutorial 06 – Single Dimensional Arrays**

Declare two single dimensional arrays with the size given by the user and find, display the followings;

* Vector Product (Multiply values of each relative elements of an array and store them in third array)
* Scalar Product (Multiply values of each relative elements of an array and store them in third array. After placing the values in third array add all the values)

#include<stdio.h>

int main()

{

int h;

printf("Enter The Size For The Array 1 And Array 2 (Array 1 And Array 2 Both Should Have Equal Size) - ");

scanf("%d",&h);

int a[h],b[h],c,f[h],g[h],k;

printf("\nArray 1\n");

for(c=0;c<h;c++){

printf("Enter Value %d - ",c+1);

scanf("%d",&a[c]);

}

printf("\nArray 2\n");

for(c=0;c<h;c++){

printf("Enter Value %d - ",c+1);

scanf("%d",&b[c]);

}

printf("\nVector Product Of Array 1 And Array 2 - ");

for(c=0;c<h;c++){

g[c]=a[c]\*b[c];

printf("%d ",g[c]);

}

k=g[0];

for(c=1;c<h;c++){

k=k+g[c];

}

printf("\nScaler Product Of Array 1 And Array 2 - %d\n",k);

}