Program in Embedded C: Date 15/092020

1.Program to find largest number from a given array of 10 numbers

```
# include <reg51.h>
void main (void)
        unsigned char block [] = {0X0B, 0X02, 0X03, 0X04, 0X05, 0X06, 0X07, 0X08, 0X09, 0X0A};
        unsigned char maximum = 0X00;
        unsigned char x;
        for (x = 0; x <= 9; x++)
          {
                if (maximum > block [x])
                  maximum = maximum;
                else
                  maximum = block [x];
          }
                P1 = maximum;
        }
2.ADD the numbers stored in the given array and display result on port1
# include <reg51.h>
unsigned char source [] = {0X09, 0X03, 0X03, 0X01, 0X01, 0X01, 0X01, 0X01, 0X01, 0X01};
unsigned char sum = 0;
unsigned char x;
void main (void)
        for (x = 0; x \le 9; x++)
        sum = sum + source [x];
                                        // Add bytes
                                        // Display the result on P1
        P1 = sum;
#include<reg51.h> //to initialize preprocessor header file
// add contents of register A WITH register B
// address of register a and b is E0 and F0 respectively
sfr i = 0xE0;
sfr j = 0xF0;
sfr port0 = 0x80;
void main()
{
unsigned char i,j,k;
i=0X24;
j=0X07;
k = i + j;
port0=k;
```

```
// Multiplication :
# include <reg51.h>
sfr a = 0xE0;
                               // Define i as an accumulator
sfr b = 0xF0;
                               // Define j as B Register
sfr port0 = 0x80;
                               // Define P1 as RESULT
void main (void)
{
               unsigned char x;
               a = 0x05;
                                       // First number
               b = 0x09;
                                       // Second number
               x = a*b;
                               // Multiply first and second numbers
               port0 = x;
                                       // Display result
}
```

Program to find smallest number from a given numbers