

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

```
//-----Fixed_uDecOut2-----
```

```
// Takes an unsigned 16-bit integer part of the  
// fixed-point number and outputs the fixedpoint  
// value on the LCD
```

```
// Input: 16-bit unsigned integer
```

```
// Output: true if successful
```

```
unsigned short Fixed_uDecOut2(unsigned short integer) {
```

```
    if(integer > 65534) { // Out of range is an error  
        printf("***.**");  
        return 0;
```

```
    }  
    else { // Splits into integer part and decimal part  
        printf("%3d.%02d", integer/100, integer%100);  
        return 1;
```

```
    }  
}
```

```
unsigned short Fixed_sDecOut3(signed short integer) {
```

```
    if(integer < -9999 || integer > 9999) { // Out of range is an error  
        printf(" *.**");  
        return 0;
```

```
    }  
    else { // Splits into integer part and decimal part  
        if(integer < 0) { // Prints negative sign  
            integer *= -1;  
            printf("-%1d.%03d", integer/1000, integer%1000);
```

```
        }  
        else { // Does not print negative sign  
            printf(" %1d.%03d", integer/1000, integer%1000);
```

```
        }  
        return 1;  
    }  
}
```

```
unsigned short Fixed_uBinOut8(unsigned short integer) {
```

```
    if(integer > 65534) { // Out of range is an error  
        printf("***.**");  
        return 0;
```

```
    }  
    else {  
        unsigned short newInt = (((unsigned long) integer)*100) >> 8; // Bit shifts to  
proper value  
        printf("%3d.%02d", newInt/100, newInt%100); // Splits into integer part and  
decimal part  
        return 1;
```

```
    }  
}
```