

EE 154 Laboratory 7

Question 1:

Write and study the following program carefully:

```
a^2 = 4
a^3 = 8
a^4 = 16
```

```
#include "stdio.h"

void func(int, int *, int*, int*) ;

int main() {
    int a = 2 ;
    int a2, a3, a4 ;

    func(a, &a2, &a3, &a4) ;
    printf(" a^2 = %d \n a^3 = %d \n a^4 = %d \n" , a2, a3, a4);
    getchar();
    return 0;
}

void func(int a, int *a2_p, int *a3_p, int *a4_p) {
    *a2_p = a*a ;
    *a3_p = a*a*a ;
    *a4_p = a*a*a*a ;
}
```

Question 2:

Write and study the following program carefully:

```
a = 5
d[0] = 1
d[1] = 4
d[2] = 9
d[3] = 16
```

```
#include "stdio.h"

void func(int, int [], int);

int main() {
    int a = 5 ;
    int d[4] = {1,2,3,4} ;
    func(a, d, 4);

    printf("a = %d\n\n" , a);

    int i;
    for(i=0; i<4; i++)
        printf("d[%d] = %d \n" , i, d[i] );
    getchar();
    return 0;
}

void func(int a, int b[], int n) {
    int i;

    a = a*a ;

    for(i=0; i<n; i++)
        b[i] = b[i]*b[i] ;
}
```