```c
/*
1) Calculate the offsets of each member of a structure
relative to a structure it belongs

2) Calculate offsets of all member with respect to
base address of outermost structure i.e. w.r.t inA
i.e. GLOBAL OFFSET COMPUTATION EXPLAINED IN CLASS

3) Develop expression to access EACH AND EVERY built in
data type variable within structure

4) Write address computation of ALL OF EXPRESSIONS in soln
to exercise 3) AS SHOW IN CLASS
/* ----------------------------------------------------------*/
// Problem 1

struct A
{
    int a;
    char b;
    float c;
}inA;

/* ----------------------------------------------------------*/
// Problem 2
struct A
{
    int a;
    char b;
    short s_arr[4];
    int c;
    float d;
}inA;
/* ----------------------------------------------------------*/
// Problem 3
struct A
{
    int a[5];
    float f[5];
    double d[5];
}inA;
/* ----------------------------------------------------------*/
// Problem 4
struct A
{
    int a;
    char b;
    struct B
    {
        double d1;
        double d2;
        struct C
        {
            int a[4];
            int b[4];
        }inC;
        float x;
        float y;
    }inB;
    double k1;
    double k2;
}inA;
/* ----------------------------------------------------------*/
// Problem 5

struct A
{
    int a1;
    char b1;
```

```c
        int c1;
        char d1;
        struct B
        {
            char a2;
            short s2[3];
            struct C
            {
                int a3;
                short s3;
                struct D
                {
                    char c41, c42;
                    short s4;
                    int n4;
                }inD3;
                int c3;
                char d3;
            }inC2;
            int n2;
            long long int p2;
        }inB1;
        long long int n1;
        long long int z1;
    }inA;
```