Q. Write a C Program to display the values of variables D, E, F and addresses of the same variables using pointers.

```c
#include <stdio.h>
#include <conio.h>
void main() { int D, E, F;
  int *ptr; clrscr();
  printf("\n Enter three values for D, E & F:");
  scanf("%d %d %d", &D, &E, &F);

  // Assign the address to pointer and display using
  // both value & address:
  ptr = &D;
  printf(" \n Value of D and address of D is %d
             and %u respectively.\n", *ptr, ptr);

  ptr = &E;
  printf("\n Value of E and address of E is %d
             and %u respectively\n", *ptr, ptr);

  ptr = &F;
  printf(" \n Value of F and address of F is %d
             and %u respectively \n", *ptr, ptr);

  getch();
}
```

① Write a recursive function to find sum and product of two positive integers.

Ans →

```
int multiply (int x , int y)
{
    if (x == 0 || y == 0)
        return 0;

    if (x == 1) return y;

    return multiply (x-1, y) + y;
}
```

One base case

2nd base case

else otherwise

Calling Recursively multiply add function

```
int add (int x , int y)
{   if (y == 0)
        return x ;
    else
        return (1 + add (x , y-1));
}
```