

## Day-6 Assignments

### Pointers

1. Write a C program that declares and initializes (to any value you like) a char, an int, a double and a float. Your program should then print the address of, and value stored in, each of the variables.  
Use the format string "%u" [%p in hex] to print the addresses as unsigned integers.  
Hint: You can use the character "&" to find addresses.
2. Write a C program to declare an integer and an integer pointer to it. Initialize the integer variable. Print the value of the int variable using pointer variable.

Hint: You can use dereferencing operator \*.

3. Write a program to perform the swap operation
4. Write a swap function and use call by reference.
5. Write a C program to read through an array of any type using pointers. Copy the elements of the first array to second array using pointers.

Hint:  $a[i] = *(a+i)$

6. A C program contains the following declaration  
`int x[8]= {10,20,30,40,50,60,70,80};`

What is the value of x? (and understand)

What is the value of (x+2)? (and understand)

What is the value of \*x?

What is the value of (\*x+2)?

What is the value of \*(x+2)?.