CSC107 2.0 Computer Programming - Laboratory I
Lab sheet 16

Note: Use **pointers** appropriately.

1. What is the output of this function

```
#include <stdio.h>
int main()
{
 int var = 5;
 printf("var: %d\n", var);

 // Notice the use of & before var
 printf("address of var: %p", &var);
 return 0;
}
```

2. Complete the following and observe the output

```
int* pc, c;
c = 5;
pc = &c;
printf("%d", *pc);
```

3. Is this statement correct? If not, correct it.

```
int a=10,*p=&a;
```

4. Write a program in C to show the basic declaration of a pointer.
   Expected Output :
   Address of m : 0x7ffcc3ad291c
   Value of m : 29

   Now ab is assigned with the address of m.
   Address of pointer ab : 0x7ffcc3ad291c
   Content of pointer ab : 29

   The value of m assigned to 34 now.
   Address of pointer ab : 0x7ffcc3ad291c
   Content of pointer ab : 34

   The pointer variable ab is assigned with the value 7 now.
   Address of m : 0x7ffcc3ad291c
   Value of m : 7

5. Write a program in C to add two numbers using pointers.

```
Pointer : Add two numbers :
-------------------------------
 Input the first number : 20
 Input the second number : 30
 The sum of the entered numbers is : 50
```

6. Write a program in C to find the maximum number between two numbers using a pointer.

7. Write a program in C to store n elements in an array and print the elements using a pointer.

```
The elements you entered are :
 element - 0 : 5
 element - 1 : 7
 element - 2 : 2
 element - 3 : 9
 element - 4 : 8
```