Logic Building Assignment : 28

Consider below code snippet to solve given problem statements.

```
#define TRUE 1
#define FALSE 0

typedef int BOOL;

struct node
{
   int Data;
   node *Next;
};

typedef struct node NODE;
typedef struct node* PNODE;
typedef struct node** PPNODE;

void InsertFirst(PPNODE Head , int no )
{
   PNODE newn = NULL;

   newn = (PNODE)malloc(sizeof(NODE));

   newn->Next = NULL;
   newn->Data = no;

   if (*Head == NULL)
   {
      *Head = newn;
   }
   else
   {
      newn -> Next = *Head;
      *Head = newn;
   }
}

int main()
{
      PNODE First = NULL;

      InsertFirst(&First, 101);
      InsertFirst(&First, 51);
      InsertFirst(&First, 21);
      InsertFirst(&First, 11);

      // Call all functions for below problem statements.
```

```
    return 0;
}
```

1. Write a program which search first occurrence of particular element from singly linear linked list.
Function should return position at which element is found.

Function Prototype :

int SearchFirstOcc(PNODE Head , int no);

Input linked list : |10|->|20|->|30|->|40|->|50|->|30|->|70|

Input element : 30

Output : 3

2. Write a program which search last occurrence of particular element from singly linear linked list.
Function should return position at which element is found.

Function Prototype :

int SearchLastOcc(PNODE Head, int no);

Input linked list : |10|->|20|->|30|->|40|->|50|->|30|->|70|

Input element : 30

Output : 6

3. Write a program which returns addition of all element from singly linear linked list.

Function Prototype :

int Addition(PNODE Head);

Input linked list : |10|->|20|->|30|->|40|

Output : 100

4. Write a program which return largest element from singly linear linked list.

Function Prototype :

int Maximum(PNODE Head);

Input linked list : |110|->|230|->|320|->|240|

Output : 320

5. Write a program which return smallest element from singly linear linked list.

Function Prototype :

int Minimum(PNODE Head);

Input linked list : |110|->|230|->|20|->|240|->|640|

Output : 20