

Design question 2:

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```
//declaration of struct :
struct participant {
char reg_id[10];
int inst_no;
struct participant *next;
};
Struct head{
Struct participant* head;
}
```

```
//in the main:
int name[1000];
Int no_of ins;
scanf char ch;
struct participant* temp;
struct head* list;
Menu driven function with r,p,c,s,f;
If switch (ch) matches with r:
                                scanf inst_no1 and reg_id
                                temp=create node(inst_no1,reg_id);
                                insert(list,temp);
                                break;
If switch(ch) matches with p:  printf(list); break;
If switch(ch) matches with c:  scanf int key;
                                count(list,key); break;
If switch(ch) matches with s:  scanf int key;
                                search(list,key); break;
If switch(ch) matches with f:  collect_Refresh(list); break;
If switch(ch) matches with t:  return 1;
```

//insert function:

```
Struct participant* temp1;
temp1=list->head;
While temp1!=NULL and temp1->inst_no!=temp->inst_no
temp1=temp1->next;
if (temp1==NULL){
temp1=list->head;
While temp1!=NULL and temp1->inst_no>=temp->inst_no
temp1=temp1->next;
```

```

if(temp1==list->head)
temp->node_pointer=temp1;
    LL->head=temp1;

Else
    temp->node_pointer=temp1->node_pointer;
    temp1->node_pointer=temp;

}
Else
    temp->node_pointer=temp1->node_pointer;
    temp1->node_pointer=temp;

```

//printf

```

struct node* selected=LL->head;
If LL->head equal to NULL
    printf("-1\n");
    return ;

while(selected!=NULL)
    Printf selected->reg_id;
    selected=selected->node_pointer;
    printf("\n");

```

//count_function

```

struct node* temp1=LL->head;
Int count=0;
While temp1!=NULL
    if( temp1->inst_no=temp->inst_no)
        count++;
    temp=temp->node_pointer;
printf("%d"count);

```

//search

```

struct node* temp1=LL->head;
Int count_before=0;
Int count=0;
While temp1!=NULL
    if( temp1->inst_no!=temp->inst_no)
        count_before++;
    temp=temp->node_pointer;
If temp1->inst_no equal to temp->inst_no

```

Count++;

printf(“%d %d”count_before,cout);

//collect_Refreshment

struct participant* temp1=LL->head;

Struct participant array_g instno[1000];**

Int inss=0;

While temp1!=null

**Every element points array_g_instno if tht inst_no isnt present previous in the array //so
only first occurrences will be copied**

temp=temp->next;

Delete every location other thn the ones pointed by the array_g_instno.