1. Define a structure Student with members roll no, name and average\_mark.

a) Re-define the structure name with Stud.

b) Create a variable Std of type Stud.

c) Read values for the members of Std

d) Print all the details

#include<stdio.h>

#include<string.h>

struct student{

int roll;

char name[20];

int marks;

};

int main()

{

int n;

printf("Enter number of times ");

scanf("%d",&n);

struct student s[n];

for(int i=0;i<n;i++)

{

printf("Enter roll number ");

scanf("%d",&s[i].roll);

printf("Enter name ");

scanf("%s",s[i].name);

printf("Enter marks ");

scanf("%d",&s[i].marks);

}

for(int i=0;i<n;i++)

{

printf("\nRoll number : %d",s[i].roll);

printf("\nname : %s ",s[i].name);

printf("\nMarks : %d",s[i].marks);

}

}

2. Define a structure Book with members book\_id, book\_title, author, price.

a)Define a variable of type Book.

b)Using a call-by-reference function read( ) , store details of the book.

c)Using a call-by-value function print( ), print the book details.

#include<stdio.h>

#include<string.h>

struct Books{

int id;

char title[20];

char author[20];

int price;

};

struct Books data(int n,struct Books b[])

{

for(int i=0;i<n;i++)

{

printf("Enter book id ");

scanf("%d",&b[i].id);

printf("Enter book title ");

scanf("%s",b[i].title);

printf("Enter book's author ");

scanf("%s",b[i].author);

printf("Enter price of the book ");

scanf("%d",&b[i].price);

}

return b[n];

}

void print(int n,struct Books b[])

{

for(int i=0;i<n;i++)

{

printf("\nBook ID : %d",b[i].id);

printf("\nBook Title : %s ",b[i].title);

printf("\nBook Author : %s ",b[i].author);

printf("\nBook's Price : %d",b[i].price);

}

}

int main()

{

int n;

printf("Enter number of books ");

scanf("%d",&n);

struct Books b[n];

b[n]=data(n,b);

print(n,b);

}

3. Define a structure Bank with members account\_no, name, type\_account(Savings/Current),

balance.

a) Store 5 customer details [Use structure array].

b) Using a function search( )that takes structure array as argument and account\_no, search

if that account\_no exist or not. If so print the details.

c) Using another function sort\_balance( ), sort the structure array on the basis of balance

and print the details.

#include<stdio.h>

#include<string.h>

struct Bank{

int no;

char name[20];

char type[20];

int balance;

};

void search(int n,struct Bank b[],int c)

{

for(int i=0;i<n;i++)

{

if(b[i].no==c)

{

printf("\nAccount Number : %d",b[i].no);

printf("\nAccount holder's name : %s ",b[i].name);

printf("\nAccount type : %s ",b[i].type);

printf("\nAccount balance : %d",b[i].balance);

}

}

}

int main()

{

int n,c;

printf("Enter number of times ");

scanf("%d",&n);

struct Bank b[n];

for(int i=0;i<n;i++)

{

printf("Enter account number ");

scanf("%d",&b[i].no);

printf("Enter acoount holder's name ");

scanf("%s",b[i].name);

printf("Enter acoount type ");

scanf("%s",b[i].type);

printf("Enter balance ");

scanf("%d",&b[i].balance);

}

printf("\nEnter account number ");

scanf("%d",&c);

search(n,b,c);

}

4. Define a structure Employee with members empno, emp\_name,

position(Manager(M),Supervisor(S),Ordinary(O)), basic\_pay.

a) Read a value n from the user and store n number of employee details.

b)Use function Read( ) to read the employee details.

c) Use function Display( ) print the employee details.

d) Use a function Search( ) which should give user a varieties of choices on the basis of

which will display the employee details. i.e, empno or emp\_name or position or basic

pay. If position is selected all the employees belonging to that category should be

displayed. If basic pay is selected all the employees within that basic pay should be

displayed.

#include<stdio.h>

#include<string.h>

struct Employee{

int no;

char name[20];

char position[20];

int pay;

};

void search(int n,struct Bank b[],int c)

{

for(int i=0;i<n;i++)

{

if(b[i].no==c)

{

printf("\nAccount Number : %d",b[i].no);

printf("\nAccount holder's name : %s ",b[i].name);

printf("\nAccount type : %s ",b[i].type);

printf("\nAccount balance : %d",b[i].balance);

}

}

}

int main()

{

int n,c;

printf("Enter number of times ");

scanf("%d",&n);

struct Employee b[n];

for(int i=0;i<n;i++)

{

printf("Enter Employee number ");

scanf("%d",&b[i].no);

printf("Enter Employee's name ");

scanf("%s",b[i].name);

printf("Enter employee's position ");

scanf("%s",b[i].position);

printf("Enter basic pay ");

scanf("%d",&b[i].pay);

}

printf("\nEnter account number ");

scanf("%d",&c);

search(n,b,c);

}