**NAME: CHANDRIMA BHATTACHARYA**

**EXAM ROLL NO: 111308009**

**CLASS ROLL NO: HX-05**

**DEPARTMENT: I.T.**

**SEMESTER: 5**

1. **Write an inline function to obtain largest of three numbers.**

#include<iostream>

using namespace std;

inline int max\_3(int a, int b, int c)

{

//int big;

return a > b ? (a > c ? a : c) : (b > c ? b : c) ;

//return big;

}

int main()

{

int a,b,c,big;

cin>>a;

cin>>b;

cin>>c;

//=max\_3(a,b,c);

cout<<"Largest amongst them is"<<max\_3(a,b,c);

}

**OUTPUT:**

>>30,25,50

Largest amongst them is 50

1. **Write a function called hms\_to\_secs() that takes three int values—for hours, minutes, and seconds—as arguments, and returns the equivalent time in seconds (type long). Create a program that exercises this function by repeatedly obtaining a time value in hours, minutes, and seconds from the user (format 12:59:59), calling the function, and displaying the value of seconds it returns.**

#include <iostream>

using namespace std;

int hms\_to\_sec(int h,int m,int s)

{

long time;

time= (3600\*h)+(60\*m)+s;

return time;

}

int main()

{

char c[8];

int n,h,m,s;

long time;

while(n!=0)

{

cout<<"\n Enter time hh:mm:ss";

cin>>c;

h=(int)((c[0]-48)\*10+(c[1]-48));

m=(int)((c[3]-48)\*10+(c[4]-48));

s=(int)((c[6]-48)\*10+(c[7]-48));

if((h>23) | (m>59) | (s>59))

{

cout<<"\n Wrong input";

continue;

}

time=hms\_to\_sec(h,m,s);

cout<<"\n Time in sec"<<time;

cout<<"\n Enter 0 if you want to close";

cin>>n;

}

}

**OUTPUT:**

Enter time in hh:mm:ss

>>34:21:59

Wrong input

Enter time in hh:mm:ss

>>12:23:10

Time in sec 44590

Enter 0 if you want to close

>>0

**3. Define a class to represent a bank account. It contains**

**Data Members:**

**Name of the depositor**

**Account Number**

**Type of account**

**Balance**

**Member Functions:**

**To assign initial values**

**To deposit an amount**

**To withdraw an amount < amount available**

**Display the name and balance.**

#include <iostream>

using namespace std;

class bankaccount

{

char name[25];

long accno;

char acctype;

long balance;

public:

void insert\_details()

{

cout<<"\n Enter name";

cin>>name;

cout<<"\n Enter account no.";

cin>>accno;

cout<<"\n Enter account type-s for savings and c for current";

cin>>acctype;

cout<<"\n Enter bank balance";

cin>>balance;

}

void deposit()

{

int dep;

cout<<"\n Do you want to deposit? If yes enter value and give cash or cheque";

cin>>dep;

balance+=dep;

}

void withdraw()

{

int with;

cout<<"\n Beware of fraud while withdrawal!";

cin>>with;

if(with>balance)

cout<<"Sorry! Don't try taking out money which is not your!";

else

balance-=with;

}

void display()

{

cout<<"\n Name of customer:"<<name;

cout<<"\n Amount left:Rs"<<balance;

}

};

int main()

{

int n;

bankaccount abc;

abc.insert\_details();

while(n)

{

cout<<"\n Enter 1 to deposit and 2 to withdraw and 0 to exit";

cin>>n;

switch(n)

{

case 1:

{

abc.deposit();

abc.display();

break;

}

case 2:

{

abc.withdraw();

abc.display();

break;

}

}

}

}

**OUTPUT:**

Enter name

>> Chandrima

Enter account no

>>111308009

Enter account type-s for savings and c for current

>>s

Enter bank balance

>>0

Enter 1 to deposit and 2 to withdraw and 0 to exit

>>1

Do you want to deposit? If yes enter value and give cash or cheque

>>25000

Name of customer: Chandrima

Amount left:25000

Enter 1 to deposit and 2 to withdraw and 0 to exit

>>2

Beware of fraud while withdrawl!!

>>30000

Sorry! Don't try taking out money which is not your!

Enter 1 to deposit and 2 to withdraw and 0 to exit

>>2

Beware of fraud while withdrawl!!

>>5000

Name of customer: Chandrima

Amount left:20000

Enter 1 to deposit and 2 to withdraw and 0 to exit

>>0

4. **Create a bank account by supplying a user id and password.**

**Login using their id and password.**

**Quit the program.**

**Now if login was successful the user will be able to do the following:**

**Withdraw money.**

**Deposit money.**

**Request balance.**

**Quit the program.**

**If login was not successful (for example the id or password did not match) then the user will be taken back to the introduction menu.**

#include <iostream>

#include <string.h>

using namespace std;

class bankaccount

{

char name[25];

long accno;

char acctype;

long balance;

public:

int login;

int password;

void insert\_details()

{

cout<<"\n Enter name";

cin>>name;

cout<<"\n Enter account no.";

cin>>accno;

cout<<"\n Enter account type- s for savings and c for current";

cin>>acctype;

cout<<"\n Enter bank balance";

cin>>balance;

cout<<"\n Create your login id";

cin>>login;

cout<<"\n Create your password";

cin>>password;

}

void deposit()

{

int dep;

cout<<"\n Do you want to deposit? If yes enter value and give cash or cheque";

cin>>dep;

balance+=dep;

}

void withdraw()

{

int with;

cout<<"\n Beware of fraud while withdrawal!";

cin>>with;

if(with>balance)

cout<<"Sorry! Don't try taking out money which is not your!";

else

balance-=with;

}

void display()

{

cout<<"\n Name of customer:"<<name;

cout<<"\n Amount left:Rs"<<balance;

}

int returnacc()

{

return login;

}

int returnpas()

{

return password;

}

};

int main()

{

int n,id,pass;

//char login[25]; char password[25];

//bool a,b;

bankaccount abc;

abc.insert\_details();

//login=\*abc.retlogin();

//password=\*abc.retpass();

while(n)

{

cout<<"Enter login and password";

cin>>id;

cin>>pass;

//a=(strcmp(c,login)==0);

//b=(strcmp(p,password)==0);

if(abc.returnacc()!=id | abc.returnpas()!=pass)

continue;

else

{

cout<<"\n Enter 1 to deposit and 2 to withdraw 3 to print and 0 to exit";

cin>>n;

switch(n)

{

case 1:

{

abc.deposit();

abc.display();

break;

}

case 2:

{

abc.withdraw();

abc.display();

break;

}

case 3:

{

abc.display();

break;

}

}

}

}

}

**OUTPUT:**

Enter name

>> Chandrima

Enter account no

>>111308009

Enter account type-s for savings and c for current

>>s

Enter bank balance

>>0

Create your login id

>>110308009

Create your password

>>1234

Enter login and password

>>1108003

>>1234

Enter login and password

>>110308009

>>1234

Enter 1 to deposit and 2 to withdraw and 0 to exit

>>1

Do you want to deposit? If yes enter value and give cash or cheque

>>25000

Name of customer: Chandrima

Amount left:25000

Enter 1 to deposit and 2 to withdraw and 0 to exit

>>2

Beware of fraud while withdrawl!!

>>30000

Sorry! Don't try taking out money which is not your!

Enter 1 to deposit and 2 to withdraw and 0 to exit

>>2

Beware of fraud while withdrawl!!

>>5000

Name of customer: Chandrima

Amount left:20000

Enter 1 to deposit and 2 to withdraw and 0 to exit

>>0