Question 1

Program code

```
#include<iostream>
#include<math.h>
#include<string.h>
using namespace std;
class Conversion
{
   private:
   int decimal,binary,octal,hexadecimal,i,n,r,len,a[20],j;
   char num[20];
   public:
   void bd()
   {
      cout<<"Enter any binary number:";
      cin>>binary;
      decimal=0;
      for(i=0;binary!=0;i++)
      {
         decimal=(binary%10)*(pow(2,i))+decimal;
         binary=binary/10;
      }
      cout<<"The conversion is "<< decimal<<endl;
   }
   void od()
   {
      cout<<"Enter any octal number:";
      cin>>octal;
      decimal=0;
      for(i=0;octal!=0;i++)
      {
         decimal=(octal%10)*(pow(8,i))+decimal;
         octal=octal/10;
      }
      cout<<"The conversion is "<< decimal<<endl;
   }
   void hd()
   {
      cout<<"Enter a hexadecimal number:";
      cin>>num;
      len=strlen(num);
      hexadecimal=0;
```

```
    for(i=0;num[i]!='\0';i++)
    {
        len--;
        if(num[i]>='0' && num[i]<='9')
         r=num[i]-48;
        else if(num[i]>='a' && num[i]<='f')
         r=num[i]-87;
        else if(num[i]>='A'&& num[i]<='F')
         r=num[i]-55;
         hexadecimal=hexadecimal+r*pow(16,len);
    }
    cout<<"The conversion is "<<hexadecimal<<endl;
}
void db()
{
    cout<<"Enter any decimal number:";
    cin>>decimal;
    for(i=0;decimal!=0;i++)
    {
        a[i]=decimal%2;
        decimal=decimal/2;
    }
    cout<<"The conversion is";
    for(i=i-1;i>=0;i--)
    cout<<a[i];
    cout<<endl;
}
void dot()
{
    cout<<"Enter any decimal number:";
    cin>>decimal;
    for(i=0;decimal!=0;i++)
    {
        a[i]=decimal%8;
        decimal=decimal/8;
    }
    cout<<"The conversion is";
    for(i=i-1;i>=0;i--)
    cout<<a[i];
    cout<<endl;
}
void dh()
{
```

```
        cout<<"Enter any decimal number:";
        cin>>decimal;
        i=1;
        while(decimal!=0)
        {
            r=decimal%16;
            if(r<10)
            num[i++]=r+48;
            else
            num[i++]=r+55;
            decimal=decimal/16;
        }
        cout<<"The conversion is ";
        for(j=i;j>0;j--)
        cout<<num[j];
        cout<<endl;
    }

};
int main()
{
    Conversion c1;
    c1.bd();
    c1.od();
    c1.hd();
    c1.db();
    c1.dot();
    c1.dh();
}
```

Output

```
Enter any decimal number:77
The conversion is1001101
Enter any decimal number:56
The conversion is70
Enter any decimal number:84
The conversion is 54
Enter a hexadecimal number: A76
2678
Enter any decimal number:77
The conversion is1001101
Enter any decimal number:56
The conversion is70
Enter any decimal number:84
The conversion is 54
```

Question 2

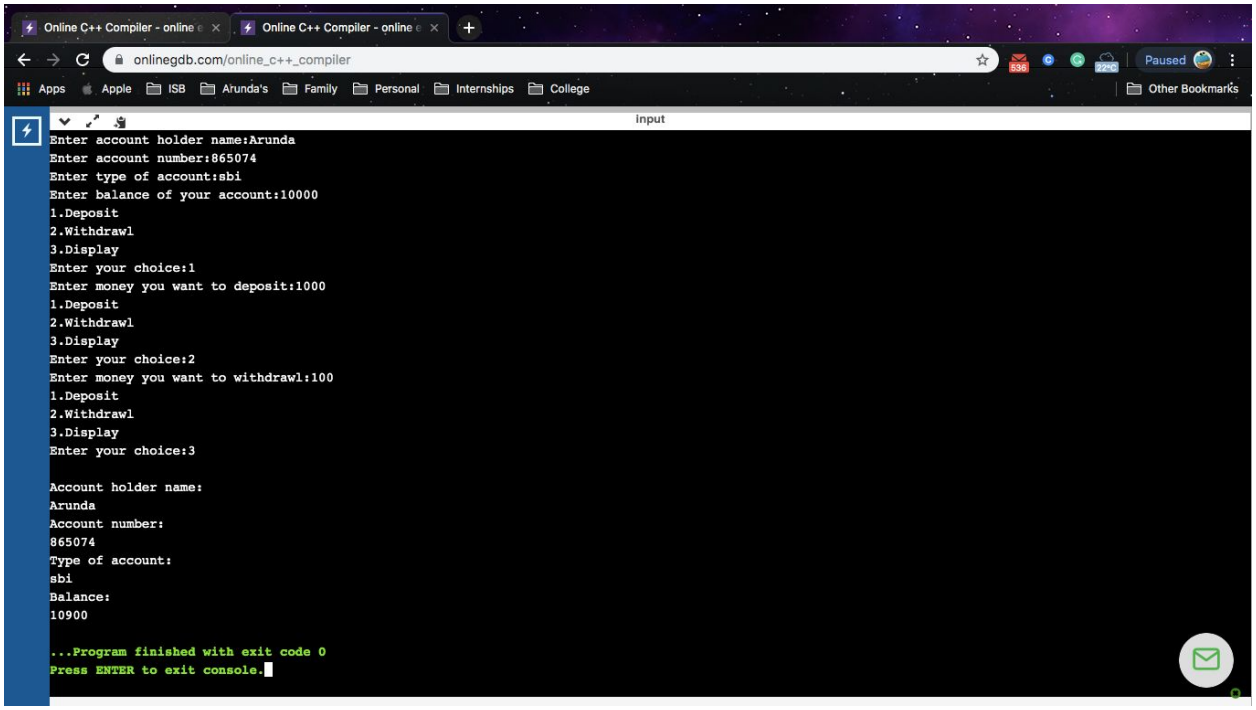
Program Code

```
#include<iostream>
#include<string.h>
using namespace std;
class bank
{
	public:
		int account_no,display;
		float bal,deposit,withdrawl;
		char acc_type[100],name[100];
		void getdata()
		{
			cout<<"Enter account holder name:";
			cin>>name;
			cout<<"Enter account number:";
			cin>>account_no;
			cout<<"Enter type of account:";
			cin>>acc_type;
			cout<<"Enter balance of your account:";
			cin>>bal;
		}
		void dep()
		{
			cout<<"Enter money you want to deposit:";
			cin>>deposit;
			bal=bal+deposit;
		}
		void withdraw()
		{
			cout<<"Enter money you want to withdrawl:";
			cin>>withdrawl;
			if(withdrawl<=bal)
			bal=bal-withdrawl;
			else
			cout<<"Insuffiecient balance";
		}
		void disp()
		{
			cout<<"\nAccount holder name:\n"<<name;
			cout<<"\nAccount number:\n"<<account_no;
```

```
                cout<<"\nType of account:\n"<<acc_type;
                cout<<"\nBalance:\n"<<bal;

        }
};
        int main()
        {;
                bank b;
                b.getdata();
                int n;
           do
           {
                cout<<"1.Deposit\n"<<"2.Withdrawl\n"<<"3.Display\n";
                cout<<"Enter your choice:";
                cin>>n;
        switch(n)
        {
                case 1:
                        b.dep();
                        break;
                case 2:
                   b.withdraw();
                   break;
                case 3:
                   b.disp();
                        break;
                default:
                        cout<<"Invalid choice";
                   break;
        }
      }while(n!=3);
  }
```

Output


Online C++ Compiler - online
Online C++ Compiler - online
onlinegdb.com/online_c++_compiler
Paused
Apps
Apple
ISB
Arunda's
Family
Personal
Internships
College
Other Bookmarks
input
Enter account holder name:Arunda
Enter account number:865074
Enter type of account:sbi
Enter balance of your account:10000
1.Deposit
2.Withdrawl
3.Display
Enter your choice:1
Enter money you want to deposit:1000
1.Deposit
2.Withdrawl
3.Display
Enter your choice:2
Enter money you want to withdrawl:100
1.Deposit
2.Withdrawl
3.Display
Enter your choice:3
Account holder name:
Arunda
Account number:
865074
Type of account:
sbi
Balance:
10900
...Program finished with exit code 0
Press ENTER to exit console.