INDIAN SCHOOL DARSAIT
DEPARTMENT OF ICT

Subject: Computer Science **Topic:** File Pointer **Worksheet No.:**9

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1. Find the output of the following C++ Code considering that the binary file **CLIENT.DAT** exists on the hard disk with a data of 1000 clients.

```
class client{
        int code;
        char cname[20];
        public:
        void registerc();
        void displayc();};

void main(){
        fstream f;
        client c;
        f.open("CLIENT.DAT",ios::binary|ios::in);
        f.read((char *)&c,sizeof(c));
        cout<<"Rec:"<<f.tellg()/sizeof(c);
        f.read((char *)&c,sizeof(c));
        f.read((char *)&c,sizeof(c));
        cout<<"Rec:"<<f.tellg()/sizeof(c);
        f.close();}
```

2. Find the output of the following C++ code considering that the binary file MEM.DAT exists on the hard disk with a data of 2000 members:

```
class MEMBER{
int Mcode;
char MName[20];
public:
void Register();void Display();};
void main()
{
fstream MFile;
MFile.open("MEM.DAT", ios::binary|ios::in);
MEMBER M;
MFile.read((char*)&M, sizeof(M));
cout<<"Rec:"<<MFile.tellg()/sizeof(M)<<endl;
MFile.read((char*)&M, sizeof(M));
MFile.read((char*)&M, sizeof(M));
cout<<"Rec:""<<MFile.tellg()/sizeof(M)<<endl;
MFile.close();}
```

3. Observe the program segment given below carefully and fill the blanks marked as Statement 1 and Statement 2 using seekp() and seekg() functions for performing the required task.

```
class Item{
int Ino;char Item[20];
public:
//Function to search and display the content from a particular record number
void Search(int );
//Function to modify the content of a particular record number
void Modify(int);};
void Item::Search(int RecNo){
fstream File;
File.open("STOCK.DAT",ios::binary|ios::in);
_____ //Statement 1
File.read((char*)this,sizeof(Item));
cout<<Ino<<"==>"<<Item<<endl;
File.close();
}
void Item::Modify(int RecNo)
{
fstream File;
File.open("STOCK.DAT",ios::binary|ios::in|ios::out);
cout>>Ino;cin.getline(Item,20);
_____ //Statement 2
File.write((char*)this,sizeof(Item));
File.close();}
```

4. Observer the program segment given below carefully and answer the question that follows:

```
class applicant
{
 long aid;
char name[20];
float score;
public:
void enroll( );
void disp( );
void marksscore( );
long r_aid(){return aid;}
};
void scoreupdate(long id)
{
fstream file;
file.open("app.dat",ios::binary|ios::in|ios::out);
```

```
applicant a;
int record=0,found=0;
while(!found&&file.read((char *)&a,sizeof(c)))
{
if(id==a.r_aid( ))
{
cout<<"Enter new score";
a.markscore( );
_____  //Statement 1
_____  //Statement 2
found=1;
}
record++;
}
if(found==1)
cout<<"Record found";
file.close( );
}
```

Write the **Statemnt1** to position the file pointer at the beginning of the record for which the applicant's id matches with the argument passed, and **Statement 2** to write the updated record at that position.

5. Observe the program segment given below carefully and fill the blanks marked as Statement 1 and Statement 2 using seekg() and tellg() functions for performing the required task.

```
class Employee
{
int Eno;char Ename[20];
public:
//Function to count the total number of records
int Countrec();
};
int Item::Countrec()
{
fstream File;
File.open("EMP.DAT",ios::binary|ios::in);
_____ //Statement 1
int Bytes = _____ //Statement 2
int Count = Bytes / sizeof(Item);
File.close();
return Count;
}
```

6. Find the output of the following C++ code considering that the binary file sp.dat already exists on the hard disk with 2 records in it.

```
class sports{
 int id;
 char sname[20];
 char coach[20];
 public:
 void entry();
 void show();
 void writing();
 void reading();
};
 void sports::reading()
 {
 ifstream i;
 i.open("sp.dat");
 while(1)
 {
 i.read((char*)&s,sizeof(s));
 if(i.eof())
 break;
 else
 cout<<"\n"<<i.tellg();
 }
 i.close();
 }
 void main(){   s.reading();}
```