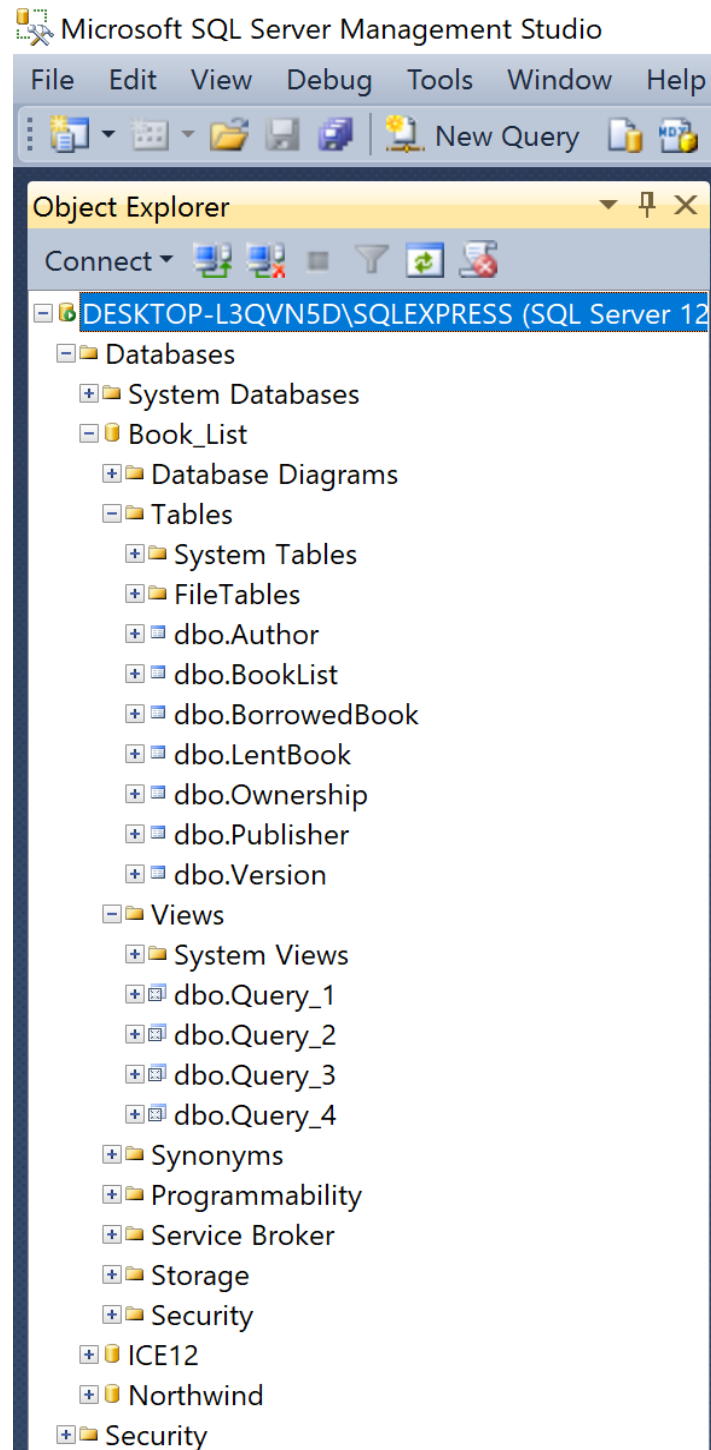


Managing Personal Library System (SQL Server)

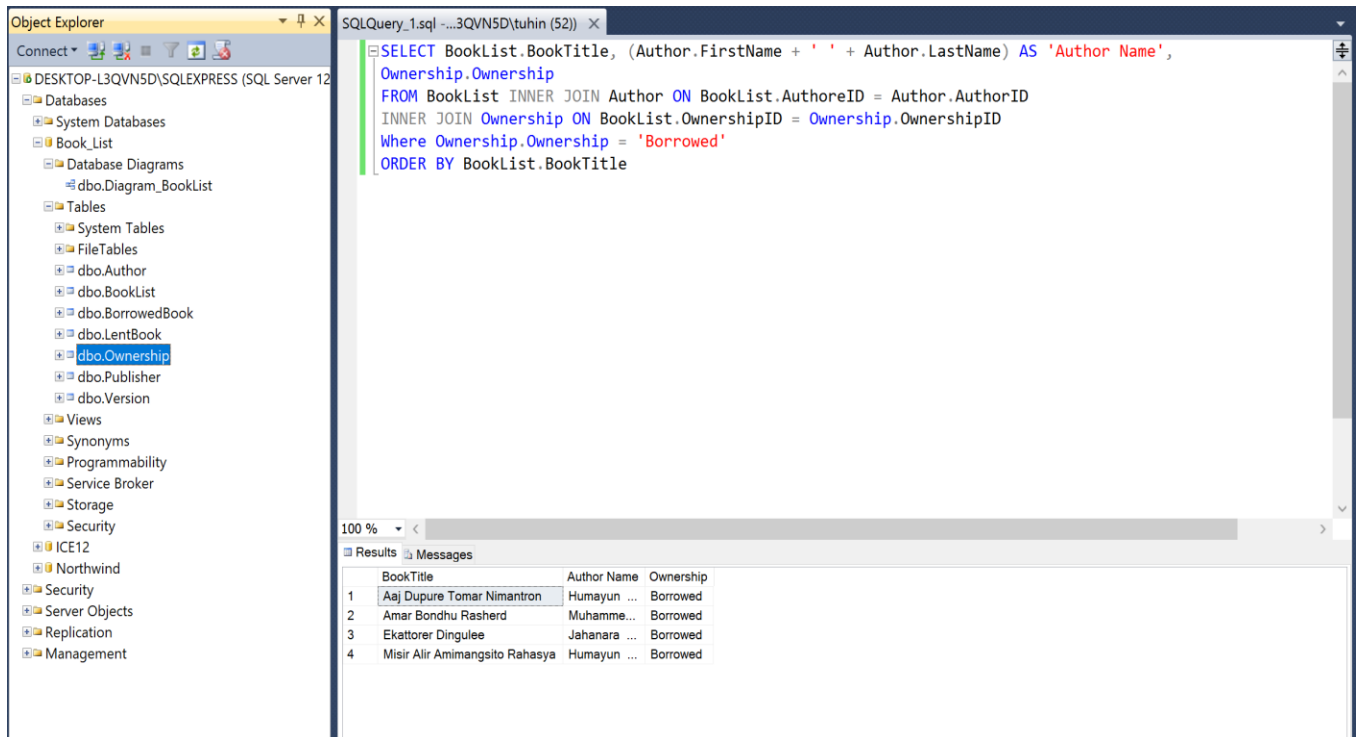
Sanzida Parvin

Database Structure



View Script of Some Queries

Query 1: Show the title of the books with the author name that are borrowed from others.



The screenshot shows the SQL Server Enterprise Manager interface. On the left, the Object Explorer displays the database structure for 'DESKTOP-L3QVN5D\SQLEXPRESS (SQL Server 12...)', including 'Databases', 'System Databases', 'Book_List', 'Database Diagrams', 'Tables', 'Views', 'Synonyms', 'Programmability', 'Service Broker', 'Storage', 'Security', 'ICE12', 'Northwind', 'Security', 'Server Objects', 'Replication', and 'Management'. The 'dbo.Ownership' table is highlighted under 'Tables'. The main pane shows the SQL query script for 'SQLQuery_1.sql'.

```

SELECT BookList.BookTitle, (Author.FirstName + ' ' + Author.LastName) AS 'Author Name',
Ownership.Ownership
FROM BookList INNER JOIN Author ON BookList.AuthoreID = Author.AuthorID
INNER JOIN Ownership ON BookList.OwnershipID = Ownership.OwnershipID
Where Ownership.Ownership = 'Borrowed'
ORDER BY BookList.BookTitle
  
```

Below the query editor, the 'Results' tab is active, displaying the query output in a table format:

	BookTitle	Author Name	Ownership
1	Aaj Dupure Tomar Nimantron	Humayun ...	Borrowed
2	Amar Bondhu Rashed	Muhamme...	Borrowed
3	Ekattorer Dingulee	Jahanara ...	Borrowed
4	Misir Alir Amimangsito Rahasya	Humayun ...	Borrowed

The View:

```

/***** Script for SelectTopNRows command from SSMS *****/
SELECT TOP 1000 [BookTitle]
      ,[Author Name]
      ,[Ownership]
FROM [Book_List].[dbo].[Query_1]

```

The screenshot displays the SQL Server Enterprise Manager interface. On the left, the Object Explorer shows the database structure for 'DESKTOP-L3QVN5D\SQLEXPRESS (SQL Server 12)'. The 'Book_List' database is expanded, showing 'Database Diagrams', 'Tables', 'Views', 'System Views', 'Synonyms', 'Programmability', 'Service Broker', 'Storage', 'Security', 'ICE12', 'Northwind', 'Security', 'Server Objects', 'Replication', and 'Management'. The 'Views' folder is expanded, showing 'dbo.Query_1', 'dbo.Query_2', 'dbo.Query_3', and 'dbo.Query_4'. The 'Query_1' view is selected.

The main window shows the SQL query editor with the following script:

```

/***** Script for SelectTopNRows command from SSMS *****/
SELECT TOP 1000 [BookTitle]
      ,[Author Name]
      ,[Ownership]
FROM [Book_List].[dbo].[Query_1]

```

The 'Results' tab is active, showing the output of the query. The results are displayed in a table with four columns: 'BookTitle', 'Author Name', 'Ownership', and 'Borrowed'. The table contains four rows of data.

	BookTitle	Author Name	Ownership	Borrowed
1	Aaj Dupure Tomar Nimantron	Humayun	Ahmed	Borrowed
2	Misir Alir Amimangsito Rahasya	Humayun	Ahmed	Borrowed
3	Amar Bondhu Rasher	Muhammed	Zafar Iqbal	Borrowed
4	Ekatrorer Dingulee	Jahanara	Imam	Borrowed

Query 2: How many Novels are there in the list with the author name?

The screenshot shows the SQL Server Enterprise Manager interface. On the left, the Object Explorer displays the database structure for 'DESKTOP-L3QVN5D\SQLEXPRESS (SQL Server 12...)'.

The central pane shows the following SQL query in 'SQLQuery_2.sql':

```
SELECT BookList.BookTitle, (Author.FirstName + ' ' + Author.LastName) AS 'Author Name',
BookList.BookType
FROM BookList JOIN Author ON BookList.AuthoreID = Author.AuthorID
WHERE BookList.BookType = 'Novel'
ORDER BY Author.FirstName
```

The bottom pane shows the 'Results' tab with the following data:

	BookTitle	Author Name	BookType
1	Aguner poroshmoni	Humayun ...	Novel
2	Chayabithi	Humayun ...	Novel
3	Himu	Humayun ...	Novel
4	Himu Remand-E	Humayun ...	Novel
5	Jochna O Jononir Golpo	Humayun ...	Novel
6	Megher Chaya	Humayun ...	Novel
7	Rupar Palonko	Humayun ...	Novel
8	Mother	Maxim ...	Novel
9	Uttaradhikar	Samaresh ...	Novel
10	Kaalbela	Samaresh ...	Novel
11	Kalpurush	Samaresh ...	Novel
12	Shatkahon	Samaresh ...	Novel
13	Gorvodharini	Samaresh ...	Novel
14	Aat Kuthuri Noy Dorja	Samaresh ...	Novel
15	Bamuner Meye	Sharatchand...	Novel
16	Bipradas	Sharatchand...	Novel
17	Datta	Sharatchand...	Novel
18	Dena Paona	Sharatchand...	Novel
19	Palli Samaj	Sharatchand...	Novel
20	Parineeta	Sharatchand...	Novel
21	Pather Dabi	Sharatchand...	Novel
22	Phera	Taslima ...	Novel

The View:

```

/***** Script for SelectTopNRows command from SSMS *****/
SELECT TOP 1000 [BookTitle]
      , [Author Name]
      , [BookType]
FROM [Book_List].[dbo].[Query_2]

```

The screenshot displays the SQL Server Enterprise Manager interface. On the left, the Object Explorer shows the database structure for 'DESKTOP-L3QVN5D\SQLEXPRESS (SQL Server 12...)', including 'Databases', 'System Databases', 'Book_List', 'Database Diagrams', 'Tables', 'Views', 'System Views', 'dbo.Query_1', 'dbo.Query_2', 'dbo.Query_3', 'dbo.Query_4', 'Synonyms', 'Programmability', 'Service Broker', 'Storage', 'Security', 'ICE12', 'Northwind', 'Security', 'Server Objects', 'Replication', and 'Management'.

The main window shows a query editor with the following SQL script:

```

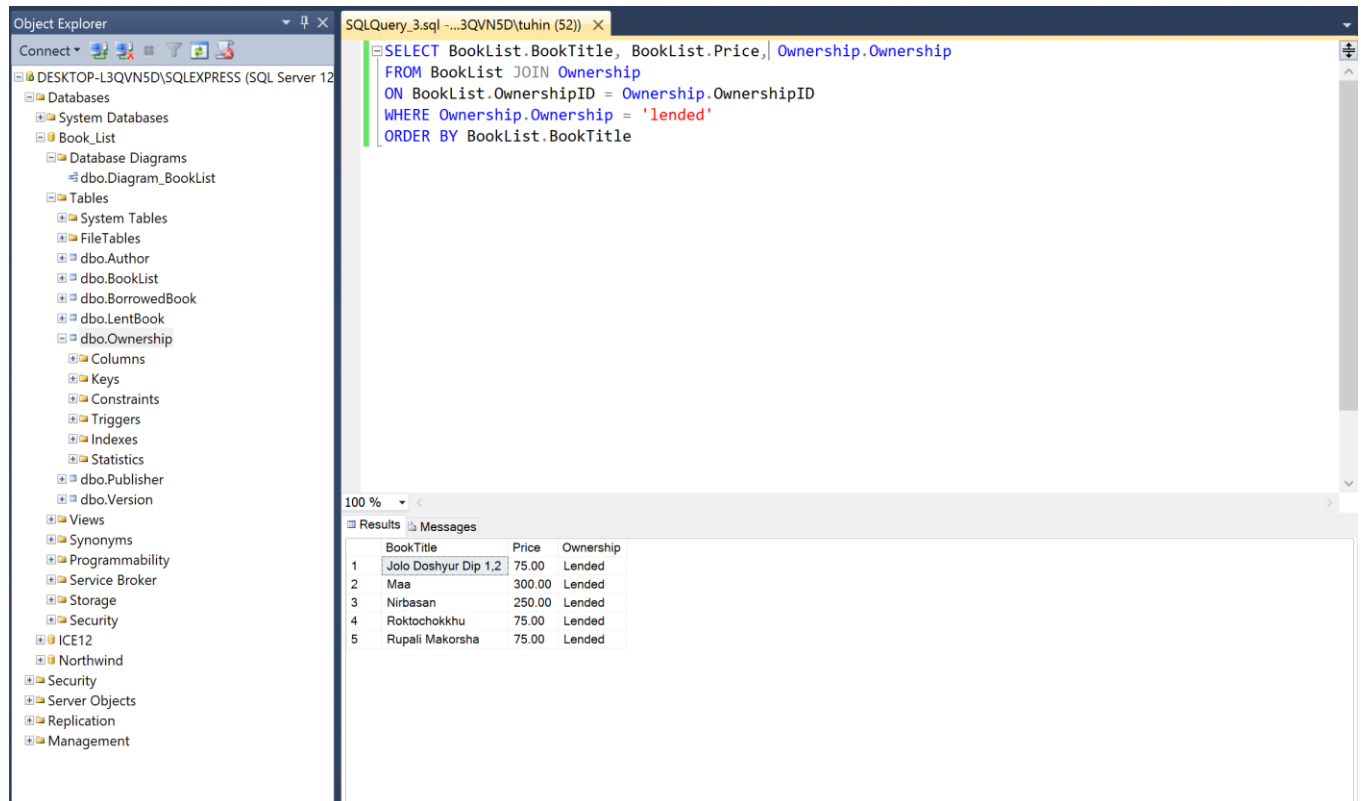
/***** Script for SelectTopNRows command from SSMS *****/
SELECT TOP 1000 [BookTitle]
      , [Author Name]
      , [BookType]
FROM [Book_List].[dbo].[Query_2]

```

Below the query editor, the 'Results' tab is active, displaying the output of the query. The results are shown in a table with the following columns: 'BookTitle', 'Author Name', and 'BookType'. The table contains 22 rows of data, with the first row highlighted in blue.

	BookTitle	Author Name	BookType
1	Aguner poroshmoni	Humayun	Novel
2	Chayabithi	Humayun	Novel
3	Himu	Humayun	Novel
4	Himu Remand-E	Humayun	Novel
5	Jochna O Jononir Golpo	Humayun	Novel
6	Megher Chaya	Humayun	Novel
7	Rupar Palonko	Humayun	Novel
8	Bamuner Meye	Sharatchandra	Chattopaddhay
9	Bipradas	Sharatchandra	Chattopaddhay
10	Datta	Sharatchandra	Chattopaddhay
11	Dena Paona	Sharatchandra	Chattopaddhay
12	Palli Samaj	Sharatchandra	Chattopaddhay
13	Parineeta	Sharatchandra	Chattopaddhay
14	Pather Dabi	Sharatchandra	Chattopaddhay
15	Uttaradhikar	Samaresh	Majumder
16	Kaalbela	Samaresh	Majumder
17	Kalpurush	Samaresh	Majumder
18	Shatkahon	Samaresh	Majumder
19	Gorvodharini	Samaresh	Majumder
20	Aat Kuthuri Noy Dorja	Samaresh	Majumder
21	Phera	Taslima	Nasrin
22	Mother	Maxim	Gorky

Query 3: Show the name and price of the books that are lended.



The screenshot displays the SQL Server Enterprise Manager interface. On the left, the Object Explorer shows the database structure for 'DESKTOP-L3QVN5D\SQLEXPRESS (SQL Server 12...)', including 'Databases', 'System Databases', 'Book_List', 'Database Diagrams', 'Tables', 'System Tables', 'FileTables', 'dbo.Author', 'dbo.BookList', 'dbo.BorrowedBook', 'dbo.LentBook', 'dbo.Ownership', 'Columns', 'Keys', 'Constraints', 'Triggers', 'Indexes', 'Statistics', 'dbo.Publisher', 'dbo.Version', 'Views', 'Synonyms', 'Programmability', 'Service Broker', 'Storage', 'Security', 'ICE12', 'Northwind', 'Security', 'Server Objects', 'Replication', and 'Management'.

The central pane shows a SQL query in the 'SQLQuery_3.sql' file:

```
SELECT BookList.BookTitle, BookList.Price, Ownership.Ownership
FROM BookList JOIN Ownership
ON BookList.OwnershipID = Ownership.OwnershipID
WHERE Ownership.Ownership = 'lended'
ORDER BY BookList.BookTitle
```

The bottom pane shows the 'Results' tab with a table of 5 rows and 3 columns: BookTitle, Price, and Ownership.

	BookTitle	Price	Ownership
1	Jolo Doshyur Dip 1,2	75.00	Lended
2	Maa	300.00	Lended
3	Nirbasan	250.00	Lended
4	Roktochokkhu	75.00	Lended
5	Rupali Makorsha	75.00	Lended

The View:

```

/***** Script for SelectTopNRows command from SSMS *****/
SELECT TOP 1000 [BookTitle]
      ,[Price]
      ,[Ownership]
FROM [Book_List].[dbo].[Query_3]

```

The screenshot displays the SQL Server Enterprise Manager interface. On the left, the Object Explorer shows the database structure for 'DESKTOP-L3QVN5D\SQLEXPRESS (SQL Server 12...)', including 'Databases', 'System Databases', 'Book_List', 'Database Diagrams', 'Tables', 'Views', 'System Views', 'Synonyms', 'Programmability', 'Service Broker', 'Storage', 'Security', 'ICE12', 'Northwind', 'Security', 'Server Objects', 'Replication', and 'Management'. The main window shows a SQL query in the 'SQLQuery10.sql' file. The query is a SELECT statement with a TOP 1000 clause, selecting columns [BookTitle], [Price], and [Ownership] from the [Book_List].[dbo].[Query_3] table. Below the query editor, the 'Results' pane shows the output of the query as a table with 5 rows and 3 columns: BookTitle, Price, and Ownership. The data is as follows:

	BookTitle	Price	Ownership
1	Rupali Makorsha	75.00	Lended
2	Roktochokkhu	75.00	Lended
3	Jolo Doshyur Dip 1,2	75.00	Lended
4	Nirbasan	250.00	Lended
5	Maa	300.00	Lended

Query 4: Show the publisher name along with the book title and the author's full name.

The screenshot displays the SQL Server Enterprise Manager interface. On the left, the 'Object Explorer' pane shows the database structure for 'DESKTOP-L3QVN5D\SQLEXPRESS (SQL Server 12...)'.

The 'SQLQuery_4.sql' window contains the following query:

```
SELECT BookList.BookTitle, (Author.FirstName + ' ' + Author.LastName) AS 'Author Name',
      Publisher.PublisherName
FROM BookList JOIN Author ON BookList.AuthoreID = Author.AuthorID
      JOIN Publisher ON BookList.PublisherID = Publisher.PublisherID
ORDER BY BookList.BookTitle
```

The 'Results' pane shows the output of the query, displaying 22 rows of data. The columns are BookTitle, Author Name, and PublisherName.

	BookTitle	Author Name	PublisherName
1	Aaj Dupure Tomar Nimantron	Humayun Ahmed	Annyaprokash
2	Aat Kuthuri Noy Dorja	Samaresh Majumder	Ananda Publishers Pvt Ltd
3	Adh Dozon School	Muhammed Zafar Iqbal	Shikha Prokashoni
4	Aguner poroshmoni	Humayun Ahmed	Annyaprokash
5	Amar Bondhu Rasher	Muhammed Zafar Iqbal	Kakoli Prokashoni
6	Animan	Muhammed Zafar Iqbal	Somoy Prokashon
7	Bamuner Meye	Sharatchandra Chattopaddhay	Ananda Publishers Pvt Ltd
8	Bhuter Hashi	Rakib Hasan	Sheba Prokashoni
9	Bipradas	Sharatchandra Chattopaddhay	Roy M. C. Sarkar Bahadur & Sons
10	Chayabithi	Humayun Ahmed	Pearl Publications
11	Copotronic Shukh-Dukkho	Muhammed Zafar Iqbal	Gyankosh
12	Cromium Oronno	Muhammed Zafar Iqbal	Somoy Prokashon
13	Datta	Sharatchandra Chattopaddhay	Roy M. C. Sarkar Bahadur & Sons
14	Dena Paona	Sharatchandra Chattopaddhay	Ananda Publishers Pvt Ltd
15	Dhakay Tin Goyenda	Rakib Hasan	Sheba Prokashoni
16	Ekattorer Dingulee	Jahanara Imam	Shandhani Prakashani
17	Ekjon Otumanobi	Muhammed Zafar Iqbal	Somoy Prokashon
18	Eron	Muhammed Zafar Iqbal	Somoy Prokashon
19	Fiha Somikoron	Humayun Ahmed	Afsar Brothers
20	Gorvodharini	Samaresh Majumder	Ananda Publishers Pvt Ltd
21	Guhamanob	Rakib Hasan	Sheba Prokashoni
22	Hat Kata Robin	Muhammed Zafar Iqbal	Mowla Brothers

The View:

```

/***** Script for SelectTopNRows command from SSMS *****/
SELECT TOP 1000 [BookTitle]
      ,[Author Name]
      ,[PublisherName]
FROM [Book_List].[dbo].[Query_4]

```

The screenshot displays the SQL Server Enterprise Manager interface. On the left, the 'Object Explorer' pane shows the database structure for 'DESKTOP-L3QVN5D\SQLEXPRESS (SQL Server 12)'. The 'Databases' folder is expanded, showing 'System Databases', 'Book_List', 'Database Diagrams', 'Tables', 'Views', 'System Views', 'dbo.Query_1', 'dbo.Query_2', 'dbo.Query_3', 'dbo.Query_4', 'Synonyms', 'Programmability', 'Service Broker', 'Storage', 'Security', 'ICE12', 'Northwind', 'Security', 'Server Objects', 'Replication', and 'Management'.

The main window shows a query editor with the following SQL script:

```

/***** Script for SelectTopNRows command from SSMS *****/
SELECT TOP 1000 [BookTitle]
      ,[Author Name]
      ,[PublisherName]
FROM [Book_List].[dbo].[Query_4]

```

Below the query editor, the 'Results' pane shows the output of the query. The results are displayed in a table with the following columns: 'BookTitle', 'Author Name', and 'PublisherName'. The table contains 22 rows of data.

	BookTitle	Author Name	PublisherName
1	Aguner poroshmoni	Humayun	Annyaprokash
2	Aaj Dupure Tomar Nimantron	Humayun	Annyaprokash
3	Chayabithi	Humayun	Pearl Publications
4	Fiha Somikoron	Humayun	Afsar Brothers
5	Himu	Humayun	Annyaprokash
6	Himu Remand-E	Humayun	Annyaprokash
7	Jochna O Jononir Golpo	Humayun	Annyaprokash
8	Megher Chaya	Humayun	Protik
9	Misir Alir Aminangsito Rahasya	Humayun	Annyaprokash
10	Rupar Palonko	Humayun	Annyaprokash
11	Bamuner Meye	Sharatchandra	Chattopaddhay
12	Bipradas	Sharatchandra	Chattopaddhay
13	Datta	Sharatchandra	Chattopaddhay
14	Dena Paona	Sharatchandra	Chattopaddhay
15	Palli Samaj	Sharatchandra	Chattopaddhay
16	Parineeta	Sharatchandra	Chattopaddhay
17	Mahesh	Sharatchandra	Chattopaddhay
18	Mejdidi	Sharatchandra	Chattopaddhay
19	Pather Dabi	Sharatchandra	Chattopaddhay
20	Animan	Muhammed	Zafar Iqbal
21	Adh Dozon School	Muhammed	Zafar Iqbal
22	Amar Bondhu Rasherd	Muhammed	Zafar Iqbal