**Relational Databases: Exercise 10(2)**

**Task 1**

Clydeview Library uses a relational database called BookData to store details of books and authors in two tables called Book and Author. Data stored in each of the tables is shown below.

Author table



Book table



Sean has been asked to list the ISBN, category, genre and publisher of all fiction books suitable for adults. He writes a SQL query to display the details needed.

Use the table below to predict the output from the query.

|  |  |  |  |
| --- | --- | --- | --- |
| **ISBN** | **Category** | **Genre** | **Publisher** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Task 2**

Sean is now asked to display the full name and nationality of all American authors. These details should be listed in alphabetical order of author surname. Use the table below to predict the output from the query.

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| Details of first Author listed |  |  |  |
| Details of last Author listed |  |  |  |

**Task 3**

Sean is asked to display the first name and website of the author with surname ‘Rowling’ together with the ISBN and date of publication of all books written by that author. Use the table below to predict the output from the query.

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Task 4**

Sean is asked to add the website details for the author called Mick Inkpen to the database. The URL of his website is <http://authorpages.hoddersystems.com/MickInkpen/first.asp>. Use the space below to predict the result of this query.

|  |
| --- |
|  |

**Task 5**

Sean is asked to display the surname of the authors, together with the genre and number of pages, of any fiction books that have more than 200 pages. These details should be listed so that the book with the most pages is listed first. Use the table below to predict the output from the query.

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| Details of first Book listed |  |  |  |
| Details of last Book listed |  |  |  |

**Task 6**

Sean is asked to display the title, category and number of pages, together with the surname of the author, of all children’s books that have fewer than 50 pages. Use the table below to predict the results of the query.

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Task 7**

In Task 1, Sean was asked to list the ISBN, category, genre and publisher of all fiction books suitable for adults.

Here is the answer table produced by Sean’s query for Task 1.



Look back at your predicted output for this query and compare your prediction with Sean’s solution.

Evaluate this solution in terms of:

* its fitness for purpose
* the accuracy of the output

**Task 8**

In Task 2, Sean was asked to display full name and nationality of all American authors in alphabetical order of author surname.

Here is the answer table produced by Sean’s query for Task 2.

Look back at your predicted output for this query and compare your prediction with Sean’s solution.

Evaluate this solution in terms of:

* its fitness for purpose
* the accuracy of the output

**Task 9**

In Task 3, Sean was asked to display the first name and website of the author with surname ‘Rowling’ together with the ISBN and date of publication of all books written by that author.

Here is the answer table produced by Sean’s query for Task 3.



Look back at your predicted output for this query and compare your prediction with Sean’s solution.

Evaluate this solution in terms of:

* its fitness for purpose
* the accuracy of the output

**Task 10**

In Task 4, Sean was asked to add the website details for the author called Mick Inkpen to the database (the URL of his website is <http://authorpages.hoddersystems.com/MickInkpen/first.asp>).

Here is the Author table after it had been updated by the query that Sean created for Task 4.



Look back at your predicted output for this query and compare your prediction with Sean’s solution.

Evaluate this solution in terms of:

* its fitness for purpose
* the accuracy of the output

**Task 11**

In Task 5, Sean was asked to surname of the authors, together with the genre and number of pages, of any fiction books that have more than 200 pages. These details should be listed so that the book with the most pages is listed first.

Here is the answer table produced by Sean’s query for Task 5.



Look back at your predicted output for this query and compare your prediction with Sean’s solution.

Evaluate this solution in terms of:

* its fitness for purpose
* the accuracy of the output

**Task 12**

In Task 6, Sean was asked to display the title, category and number of pages, together with the surname of the author, of all children’s books that have fewer than 50 pages

Here is the answer table produced by the query that Sean created for Task 6.



Look back at your predicted output for this query and compare your prediction with Sean’s solution.

Evaluate this solution in terms of:

* its fitness for purpose
* the accuracy of the output