Министерство образования Республики Беларусь Учреждение образования "Брестский государственный университет" Кафедра ИИТ

Лабораторная работа №7 По дисциплине "Языки программирования" Вариант №9

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Проверил:

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Дата выполнения:

11.12.21

Задание:

При выполнении лабораторной работы необходимо для заданной предметной области средствами MySQL:

- 1. Изучить теоретический материал
- 2. Создать базу данных
- 3. Создать таблицы, определить поля таблиц, индексы
- 4. Определить связи между таблицами и ограничения целостности
- 5. Заполнить согласованными данными таблицы БД
- 6. При необходимости исправить введенную информацию
- 7. Оформить отчет

Предметная область: Книги

Создание базы данных:

CREATE DATABASE BooksDB;

Создание таблиц:

```
Таблица книг:
```

```
CREATE TABLE "Book" (
     "Id" INTEGER,
     "Name"
               TEXT NOT NULL UNIQUE,
     "AuthorId" INTEGER,
     "GenreId"
               INTEGER,
     "Description"
                    TEXT.
     "ImageSrc" TEXT,
     "Price"
               REAL,
     "Rating"
               REAL,
     "RatingsCount"
                    INTEGER,
     PRIMARY KEY("Id" AUTOINCREMENT),
     FOREIGN KEY("AuthorId") REFERENCES "Author"("Id"),
     FOREIGN KEY("GenreId") REFERENCES "Genre"("Id")
);
```

Таблица жанров:

```
CREATE TABLE "Genre" (

"Id" INTEGER,

"Name" TEXT NOT NULL UNIQUE,

PRIMARY KEY("Id" AUTOINCREMENT)
);
```

Таблица авторов:

```
CREATE TABLE "Author" (

"Id" INTEGER,

"Name" TEXT NOT NULL UNIQUE,

PRIMARY KEY("Id" AUTOINCREMENT)
);
```

Вставка значений:

INSERT INTO Author(name) VALUES ('Xuesong Ye'),('Qiang Cai'),('Yuquan Chen'),('Nidhi Bhatla'),('Kiran Jyoti'),('Argyro Kampouraki'),('Christophoros Nikou'),('Roohallah Alizadehsani'),('Mohammad Javad Hosseini'),('Abbas Khosravi'),('Fahime Khozeimeh'),('Mohamad Roshanzamir'),('Nizal Sarrafzadegan'),('Saeid Nahavandi'),('Manish Motwani'),('Damini Dey'),('Daniel S. Berman'),('Guido Germano'),('Stephan Achenbach'),('Daniele Andreini'),('Matthew J. Budoff'),('Filippo Cademartiri'),('Tracy Q. Callister'),('Hyuk-Jae Chang'),('Kavitha Chinnaiyan'),('Benjamin J.W. Chow')

```
INSERT INTO Genre(name) VALUES ('Комедия'), ('Драма'), ('Романтика'), ('Фэнтези')
```

INSERT INTO Book(name, GenreId, AuthorId, Description, ImageSrc, Price, Rating, RatingsCount) VALUES

("Тут могла бы быть ваша реклама", 1, 1, "Супер рекласа",

" CBUWFRgVFRYYGRgYFRwaHBwYGRoYGBwaGBwaHBoaHBocIS4lHh4r HxgaJzgmKy8xNTU1HCQ7QDs0Py40NTEBDAwMEA8QHhISHjQhJCs0ND Q0MTE0NDQ0NDQ0NDQ0NDQ0NDQ0NDQ0NDQ0NDQ0NDE0ND Q0MTQ0MUA0NDExNP/AABEIANEA8QMBIgACEQEDEQH/xAAcAAAB BQEBAQAAAAAAAAAAAAQIDBgcFBAj/xABFEAACAQIDBAYGC AMHAwUAAAABAgADEQQSIQUxQVEGImFxgZETMqGx0fAHQlJicpLB4 RQjgkRUorLC0vEkY3MVJTNTo//EABkBAQEBAQEBAAAAAAAAAAAA AAABAgMEBf/EACARAQEBAQACAQUBAAAAAAAAAABEQIhMQM EEiJBUYH/2gAMAwEAAhEDEQA/ANlhCEAhCEAhCEAhCJeAsJyMb0goU mKOxuts2VGcIDuLlQQnPXhru1nWBhcpYQhCCEIQCEQm05uI27hUNnxFJ TyLrfyveB04Tir0qwRNv4ml4tYeZnToYpHGZHV15owYeYMCeEIQCEIQCEJ zNr7TWgoJUszNlVRYFmsTvOgAAJJ4AcdASyW3I6UWcfYu1vTZlZcjoRmU NmBVgcrq1gSpsw1AN1PZfr3gssuUsIQhBCEIBCEIBCEIBCEIBCEIHC6T4io iU/RuUzVQjOoVmVSrkWDgrcsEGoO+cl+kFemjBl9KchyMi2YPbqioo0K5rd ZbW4qBrLNtPBLWptTa9mG8b1YEFWH3gwBHaJTwXVvRVbCoovporKNM 6X3ruuN6k2PAnPVsen4Jx1M69lo0AFyE5r3zE73LeuzdrHU98s/Rty2Fw7Mbk 0EueZyi5lZq1Ais53KpY9yi590tWwaBTD0UbelFFPeqKD7bxy39VkkkdGEJ5 NoY5KKF6jZVHiSeAA4nsmnjS166opZ2CqouSxAAHMk7pSNu9Ost1oAW3 Z2BJP4U007W8jOBt/pG2Ie2oQEZUG4fea3rP7tw4k8DFYhBooDNz4Dv+EN88/1 Pt Hb Nar/8 lR 3 H3 26 v5 BZ B4 Cc/Pf 50 jR Tubn X3 COhv MEkw 1d6 bZ 6 bsj faQlar Name (Normalis) State (Normalis) StaT4kbx2SOECz4Xp3jUIzNTqAbw6ZSf6lIse2xl02D00oYghG/IVDoFYgqx+4+4 9xseyZJAi++GbzH0GDFmcdDemBBXD4lrjRUqHUg7gjnlybz5zRxDFmCVD pA2bFWO6nQW3fVZ83spJLfKdtsf8AVv20KRHg1YH9POHf6WS/LNeHDY2 pSqsUQHNRRc7GyKVaoTcDrMesOqLDXUjj6f4/E3v/ABBvyFOmE8ipa39XjI

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daWPFMBVFfDsy2FjnpMufjbVagOgHqNe+ls2459TK9NfboAZlpVXRL5nXI qgrvUBmDEg6GynW43ggMXabU6yU69Sn/MRmGmQKykdUlmIZSCbHQ3Q 89HY6lbD1Qh6yF6gvqM4f02Uj7JJA7jMd2ttSpiX9LWIZrAABbKq6kKo32uT vJOu+Xnay3bC4pKi5qbq63tdCGFxvFxPRMk+jXaZp4k0SepWBsP+4guCOV0 Vgedl5TW5qzAQhCQEIQgEIQgEgxVdaaM7GyopZjyCi5PkJPKP9J208lBKC nrVm1/BTsx82KDuJgUDpBtp8XVNRrhRcInBUvu/EdCTxPYBOTe3d7v2j4Gb kwEI1V5aQsefsgKzWEMthl4k3PZ8/oIxjZteAuO/cf084qsb2G+SunMya9KngP +BFraLYaljYAant048vGCLYS8/R3s9WapWZQShCLcXsSLtbvuvlMW409fQL YpWlSrOCrq1a6sCrddkUEg6jq0x+aXgwVQNwtFnO+WLdcDbGxfSVs4AKV KL0Ky7iUILI47Q1x3NfhMyxeFek7U39ZTa/McG8Rr7OE2ucfbPR+liNWQZu eob8w/4lnSy/pky34/8i++e/E0b4ak4+rUemf6iHX9fzSw4voY603ynMVYOgNs x0s6kjQg2Sx01E82w8L6bC4rDkEOjrUAIsQSBb/FTF5rdb2KnUBGoPHj+0Yj ddhuJUew8Oe+S1dVI48uIM8dPrP4HwOnwmkOxGjKe/8ASSGR4kkgE77/AK R+bd2wPHl6xvy/U3/SdFdr1/SUqpqM70CMmc3so3pfkRoSbmxnhKHMSNwB J7ASov5sB4xZqenPr20baPTvDjOtJHf0lIG/qqKjKVysGsbBQtyL7ha++Zwo0i wlnMjL07MxJp1qVQG2SqjeCsCR3EXHjPoAT50blzE1voZ0sXEKKNWy1lXu FQD6y8m5r3kabpRcYQhMghCEAhCEBDumK9N9penxlQg9Snakv9F85/OW Hcomq9JNpjDYepV4qtkHN26qD8xHheYQTbeST27z2mageTGA37vf2xF62/d 75JNIIQiO1heFPTD5kqVDuQon9bklR5I/kI6jTtrxO/4R+HxJFH0VtPSmox5sE yr4DM/5uyJTa4B5zFdZ4ODDymqdAqZTBqSLMXckcfXaw8rCZI7izZr2LAG 2+x0NvCbV0ddWoZkIKtUqFSDcWLta3hMdVb6cDa3/AK07n0BoUUvoMys9 uFyyML9wE4mNqbcpaui11H3KNQeSBXmklW589PcO7jJpnUxzOjdRnoLUa 6+kUN6MsWCHUMoYjNa/A7jcTrwEajg3sb2JB7COEyycZ4aWHomqzpl9IUy NlluVvcZhxtrYnmZ66hIBsLngBYX89Jlu1OkOOw1T/q8HTamW0cAI3etZCQ r27AT2SzyjsdIOhzM9SpRI61mym+rG+cfd3A313ndvme0qTJUZHUqy3BU7x 8/CbL0b2/QxVPNSckroyvo6nhmHEfeGhlY+kbBorU6iqA5OUkCxIs517iPaZu X9N83fFUPF7vH4xmbqjvj8V6vl75Ap6vc01+mnf6I4IVcQ9JrkPhao0336liO0E AiV4Nz0PEcQeII4GW3oDUy4stx/h6mUc2GRgPJWlTzl+uxuW6xPEltSfEmajl 17Iag+dYXJ7O/4R0S8rBQI6m7KwZCVZWDKw0IYG4IjYSjd+j+0PT4enWO

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RLp7R8+RnqGonntpftv5nX3yemdJCom6pB+bH95NviOtxI6L/AFTKj2o+ayn1 tyk/WHInn28Z4MTTKX00sbdh5SeNNU+q/WHbrp+szmOk6l8VsGHwhKAA XyKB5C2nbpPThtmMbtouc5iTvJsFvbuUSqdFOkuJVApp/wASl9SrItZDybMQ H4am3a19JomHrZ1DZSt+DFSR35SR7Zxvhu92eo8a7KXixv2WHssZ4Nt7HV qRXVlLLmB+yGBO7XhLAxlP6YdLVoKaVFg1Zhv3imD9Y30Lch4nTem2p9 3Sh9JMFhqTinSDZhq5LswHJLE7+Jv2ds5F4O5JLEkkkkkm5JJuSSd5vI2flO8 nhz6u0rvaRhS2vD53RypfU+Xxk1OnmNibDeTyUbz88bRUhHexQfcQHxGkl M82JcMWY6XOg5DcBbnaT02uoMzXSXXs2LtBqFVKy3JpvcjmpBDL4qSO +06PSPptWxa+iyJTpFgbC7OcuozPcC17GwHjK85sw5HQ/GedVs/iR74kTqPR CEJtzECIQgdfoM5XaGGH33HeDSqC/tm5zAti40UMTRrsCRTe7W35SCrW5 kBibdk3mk4YAqQQCCNxB1BEzfapIQhMhDPnzGplq1FO9arg94dgfdPoQyj 9LOhArua1BlSo2rq18jn7Vx6reBB7NTLKMthPdtPZGIw9/TUnQD6xGZPzrdf bPDNahj8owqToNw3nt5SVo24Aiqaovcdhi0Tp7Y1Dr4GANmPf79fjKJpHVp3 1G+SRGaEMp1L7/n9451v86yM0953DfGo5G7UdsKs3Q3a1LDVT6cfy3Wxb LmAa65WYchZtRr1j4a1QoJlvTayuuhRrixGjLvHiJgPpr7vnwnWO3qzYelh1dl RA4YKSucs7EAkalVUgAbt/ITneda2r/022+IGkKSP6Stu9YWWw1epktrromlz wteZb1vMkk8STqTHARZrnmRnTCnbHKoEa9QCMNQndp75oSO1pE1RrW3 Dj28vL3xSlt++CLc35e+SwlwiU7C5klJiFbs19m72GNqt7IqDRu0AeZMX01zfJ cQwIuPnmJEwJFzx+T7YOLEjgR8/PZJPq+323Mk8L1dgpvwO/wB8knmt+0lp 1L6Hf7D3fCVhJCEJUE2boAXOAo5xwbLfimdvRnuyZbdlplOwtn+nxFKifVd 7N + BQWfXh1VIvN2pUwoAAAAFgBuAG4CZqpIQhMghCEBCL6Tg43ohgqrZnoKG4lC1O/fkIv4zvwgUzF/Rzg3vlNWmfuuGH/wCgb3ygdK+iz4JlObPTY2 V7WIbfkYcDbUEaGx3Wm5TxbS2fTr02p1VDq28Hs1BBGoIOoI1EsuD57TeI+qOPHdLr0u6E08LSbEU6j5VZQVcBjZ2C9VhbdfcQe+UxF4nf7uyal0ILns9pg NN2vzxMM1zYcN/wjwLQGMl98iQ2Nj89s9EY6X7+BlDHo8QY1WK6Wv5 R6PbQ/Pd2SWQQ+n7LeF/dGs5PzYSUoIZAIPCJU3X5ydVkaG9u+/mCTHsdI hTHNz7JIBYRlJePlFqHhAYq3Pz5SRV584IthHRhqCudRpw+f1kwFtJEou3dr8 Pnsk0YPPaxt5d0laneOZAd8AJQxXI0P7/vHgybC4V6rZKaM7ckUsRfnbcO0zu 0ehOOYX9EF7GdAe/RjJsR0Poxw2bFO/BKJ/M7KB7FeaxK90R6P/wlHKSGq

uQzkXtcCwVb65QPMknS8sMzaohCEgIQhAIQhAIQhAov0nbQUYcYcDNUq MGAG9VpkOW/w27sx4GZYMx32Hdrf4Tatr7Aplq+JszVWw7oMzXVRIYdV baE39rczfF1OnhNQRutrEfPbJFMWRotjbymhJCEIQjKDvjQCO0R8CYCAxr7 rDeR5dsW993nGkW0G8/NzJVKqgeHvPz7YmXMewe2BHAfPbHqLaQFjVXi Y6EqCBiE21MtnQ/oh/Foa1RmSnmKqFAzsV3sCQQFvpu3g7rSWipqsWa3R+j zBD1hUf8AE9v8gWdHD9D8ClrYdDb7ZZ/85Mn3KyfY/R/EYk/ykJW+rt1UH 9R3nsW5l92P9HlBLNiGaq32RdKY8AczeJseUu1NAosAABuA0AHdHyWiD C4ZKahURUUblVQoHgJPCEgIQhAIQhAIQhAIQhAIQhA523toLQw9SqwuE Q6bsxOir4sQPGYIi2AHIAeU2L6QsLWq4YU6KNULVULBbXyrdr6n7QWZq OjON/u1X8o+M1ByYhE6p6O4z+7VvyGOXo1jTuw1XxW3vMuwxx8/Ax06z dFscf7NU8l/3Ro6K47hhqn+D/dGwxy5HUfyB1+Hfe07g6L47+7VB+T/AHRo 6KY0f2ap5L7OtGmOMXHPy1iqtu8zqno7ix/Zq3gjH2iKOjmM/u1b8hHvjYY5 Si0WdgdF8cf7NU8cg97San0Ox7f2dh+J6Y/1xsMcGMd7dp93fO8/Q3aHDDm 3ZUpX/wA8ROhOP/ux/PR/3xsMcLD0GqOiLq7uqLyzOQo05XM+gdmYJaNJ KSeqiqo5mw3ntO898z3ob0LrpiVr4hAi07lVzKxZyCB6pIAW99eNuU04TNoI QhICEIQCEIQCEIQCEIQCEIQCEIQGtwkZ4whCFWKIsICxBCEKIQh KGwEISBViQhCFEDFhBPRRHQhICEISqIQhAIQhAIQhAIQhA//Z", 14, 10, 100)