

Министерство образования Республики Беларусь  
Учреждение образования «Белорусский государственный  
университет  
информатики и радиоэлектроники»

Факультет компьютерных систем и сетей  
Кафедра вычислительных машин систем и сетей  
Дисциплина: Базы данных

**ОТЧЕТ**  
по контрольной работе

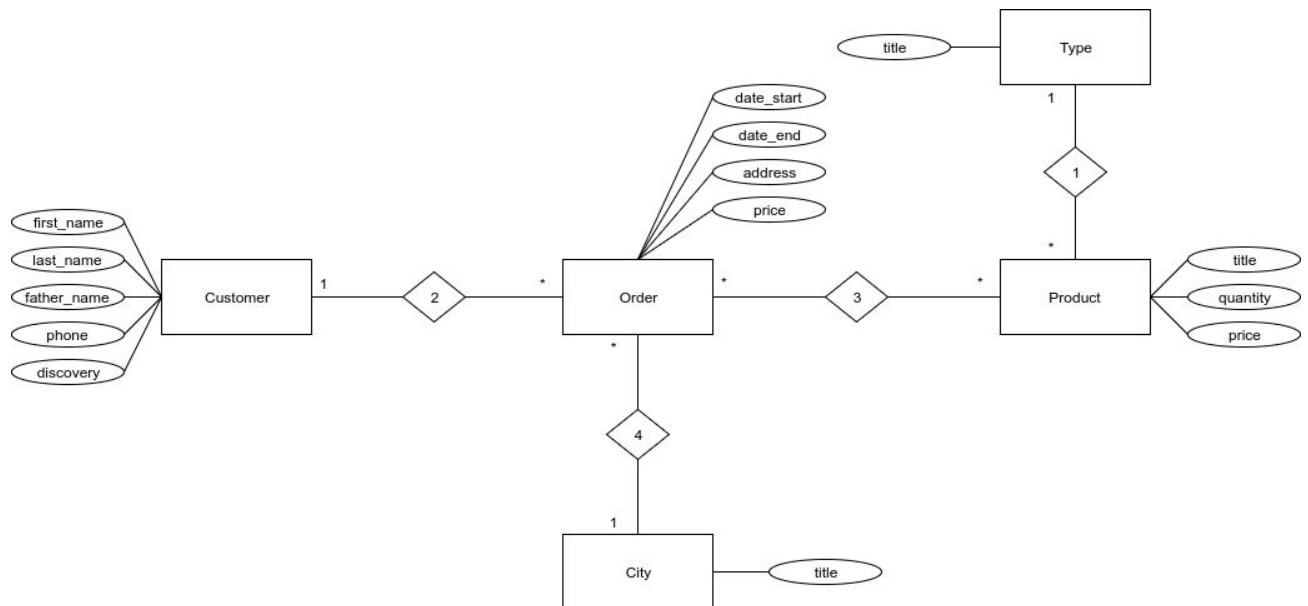
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Павец Н. К.

Руководитель: старший преподаватель

Калабухов Е. В.

## ER - схема



## Создание таблиц

DROP TABLE CITIES;

CREATE TABLE CITIES

(

ID NUMBER(9) NOT NULL,

TITLE VARCHAR2(255) NOT NULL,

CONSTRAINT CITY\_TITLE\_UK UNIQUE (TITLE),

CONSTRAINT CITY\_ID\_PK PRIMARY KEY (ID)

);

DROP TABLE CUSTOMERS;

CREATE TABLE CUSTOMERS

(

ID NUMBER(9) NOT NULL,

FIRST\_NAME VARCHAR2(255) NOT NULL,

LAST\_NAME VARCHAR2(255) NOT NULL,

```
FATHER_NAME VARCHAR2(255) NOT NULL,  
PHONE VARCHAR2(255) NOT NULL,  
DISCOVERY NUMBER(9),
```

```
CONSTRAINT CUSTOMER_ID_PK PRIMARY KEY (ID)  
);
```

```
DROP TABLE P_TYPES;
```

```
CREATE TABLE P_TYPES  
(  
  ID NUMBER(9) NOT NULL,  
  TITLE VARCHAR2(255) NOT NULL,  
  
  CONSTRAINT P_TYPES_UK UNIQUE (TITLE),  
  CONSTRAINT P_TYPES_ID_PK PRIMARY KEY (ID)  
);
```

```
DROP TABLE PRODUCTS;
```

```
CREATE TABLE PRODUCTS  
(  
  ID NUMBER(9) NOT NULL,  
  TITLE VARCHAR2(255) NOT NULL,  
  QUANTITY NUMBER(9),  
  PRICE NUMBER(9, 2),  
  P_TYPE_ID NUMBER(9) NOT NULL,  
  
  CONSTRAINT PRODUCT_ID_PK PRIMARY KEY (ID),  
  CONSTRAINT PRODUCT_P_TYPE_FK FOREIGN KEY (P_TYPE_ID) REFERENCES P_TYPES  
);
```

```
DROP TABLE ORDERS;
```

```
CREATE TABLE ORDERS  
(  
  ID NUMBER(9) NOT NULL,
```

```

DATE_START DATE,
DATE_END DATE,
ADDRESS VARCHAR2(255) NOT NULL,
PRICE NUMBER(9, 2) NOT NULL,
CUSTOMER_ID NUMBER(9) NOT NULL,
CITY_ID NUMBER(9) NOT NULL,

CONSTRAINT ORDER_ID_PK PRIMARY KEY (ID),
CONSTRAINT ORDER_CUSTOMER_FK FOREIGN KEY (CUSTOMER_ID) REFERENCES
CUSTOMERS,
CONSTRAINT ORDER_CITY_FK FOREIGN KEY (CITY_ID) REFERENCES CITIES
);

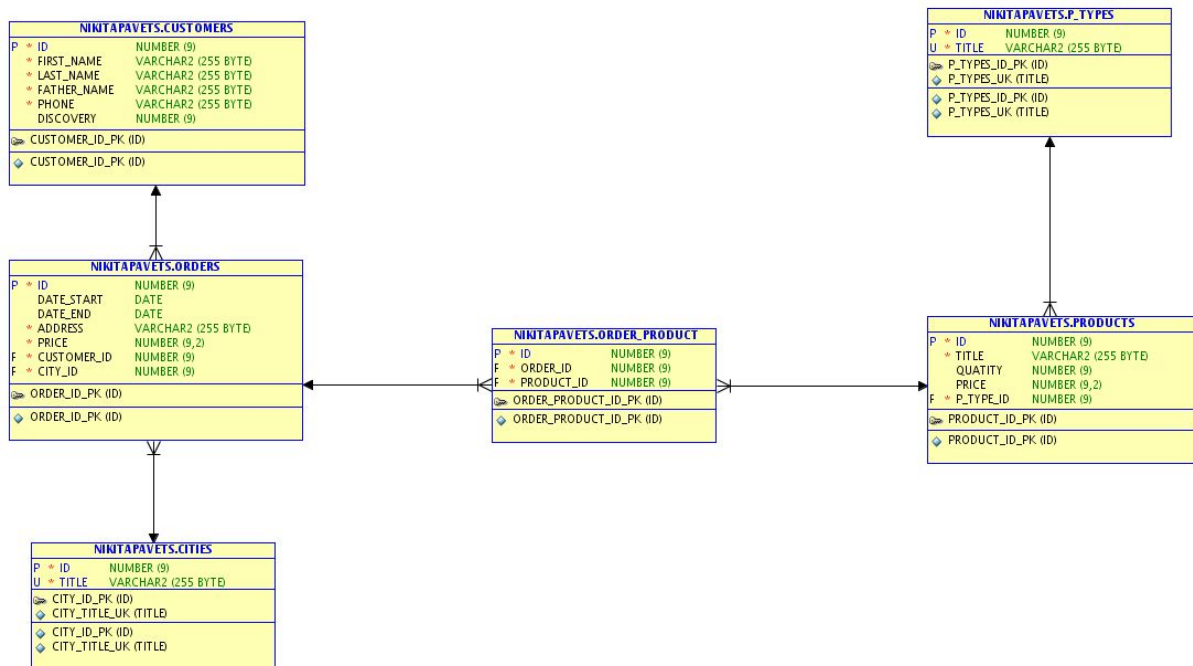
DROP TABLE ORDER_PRODUCT;

CREATE TABLE ORDER_PRODUCT
(
ID NUMBER(9) NOT NULL,
ORDER_ID NUMBER(9) NOT NULL,
PRODUCT_ID NUMBER(9) NOT NULL,

CONSTRAINT ORDER_PRODUCT_ID_PK PRIMARY KEY (ID),
CONSTRAINT ORDER_PRODUCT_ORDER_FK FOREIGN KEY (ORDER_ID) REFERENCES
ORDERS,
CONSTRAINT ORDER_PRODUCT_PRODUCT_FK FOREIGN KEY (PRODUCT_ID)
REFERENCES PRODUCTS
);

```

## Реляционная модель



## Запрос

```

SELECT DISTINCT cus.first_name, cus.last_name, cus.discovery
FROM customers cus
INNER JOIN orders ord
ON ord.customer_id = cus.id
ORDER BY cus.discovery DESC;
    
```

SQL   All Rows Fetched: 3 in 0.01 seconds			
	FIRST_NAME	LAST_NAME	DISCOVERY
1	Nik	Pavets	50
2	Alex	Kult	10
3	Nikolai	Baskov	5