Abylkas Saginov Karaganda Technical University

Information Technologies and Security Department

**Laboratory work №5**

**Discipline**: Database management systems

**Topic**: Extracting data using Transact SQL

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1. **List of employees of the “i” division with many children (3 dependents)**

SELECT табельный\_номер, ФИО, наименование

FROM Работники

JOIN Подразделения ON Подразделения.код\_подразделения = Работники.код\_подразделения

WHERE кол\_во\_иждивенцев > 1 AND Подразделения.наименование LIKE 'Отдел%';

1. **Number of employees by pension funds**

SELECT наименование, COUNT(\*) AS количество\_работников

FROM Работники

JOIN Пенсионные\_фонды ON Пенсионные\_фонды.код\_фонда = Работники.код\_пенсионного\_фонда

GROUP BY наименование;

1. **Employee length of service**

SELECT

ФИО,

dbo.fn\_ПолныхЛет(дата\_приема) AS стаж

FROM Работники;

1. **List of employees with 10 to 15 years of service**

SELECT ФИО, dbo.fn\_ПолныхЛет(дата\_приема) AS стаж

FROM Работники

WHERE DATEDIFF(YEAR, дата\_приема, GETDATE()) BETWEEN 10 AND 15;

1. **List of employees included in the i-th order, whose last names begin with the letter K**

SELECT r.ФИО, p.номер\_приказа, tp.наименование

FROM Работники r

JOIN Приказы p ON r.табельный\_номер = p.табельный\_номер

JOIN Типы\_приказов tp ON p.код\_типа\_приказа = tp.код\_типа\_приказа

WHERE p.номер\_приказа = 1 AND r.ФИО LIKE 'К%';

**Control questions**

1. **What are the features of the Query Editor menu?**

The Query Editor menu in SQL Server Management Studio (SSMS) provides features for creating, editing, executing, and debugging SQL queries. Key functionalities include writing SQL queries manually, generating queries via a graphical interface, executing single or multiple queries, using parameterized queries, displaying results in tables, text, or files, exporting results to formats like Excel or CSV, syntax highlighting, and query formatting.

1. **Describe the structure of the SELECT statement.**

The SELECT statement retrieves data from a database and can include clauses like SELECT (columns to retrieve), FROM (tables to query), WHERE (filtering conditions), GROUP BY (grouping data), HAVING (filtering grouped data), ORDER BY (sorting results), and optional modifiers like DISTINCT (eliminate duplicates). It’s the most commonly used command for querying data.