Курсовий Проєкт

Автоматизована система розрахунку заробітної плати
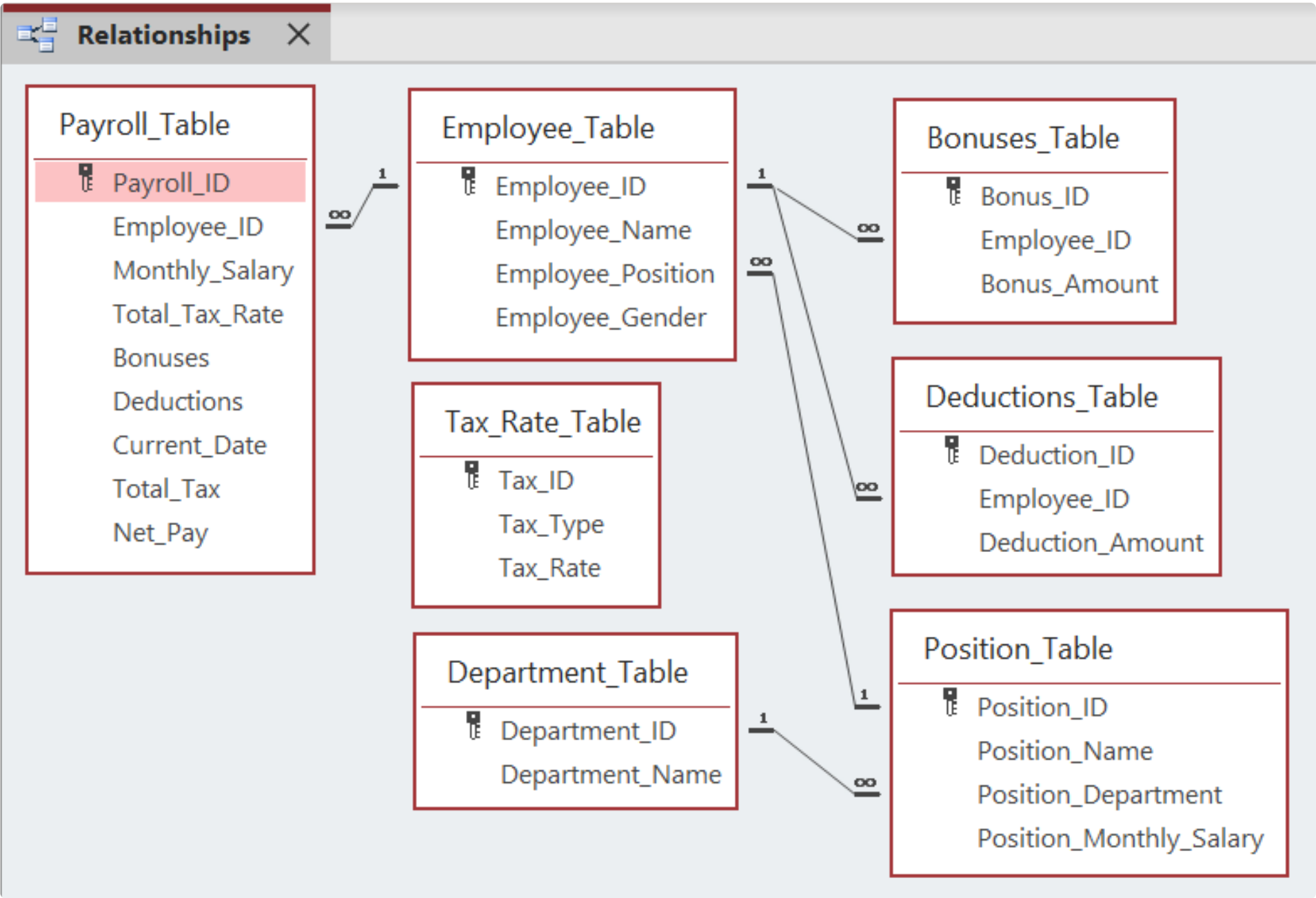
Виконано Онищенко Олегом, студентом групи КНТ-122

Резюме

База даних призначена для розрахунку заробітної плати працівників фірми

Система передбачає автоматичний розрахунок заробітної плати працівників фірми з урахуванням податків

Схема даних

Таблиці

Bonuses Table

Preview

Bonuses_Table

Bonus_ID	Employee_ID	Bonus_Amount	Click to Add
1	Abraham	700 ₴	
2	Ruth	1 200 ₴	
3	John	1 000 ₴	
4	Solomon	7 777 777 ₴	
5	Adam	1 600 ₴	
6	Adam	1 200 ₴	
7	Adam	77 ₴	
8	Daniel	77 ₴	
9	Jacob	77 ₴	
10	Micah	77 ₴	
(New)		0 ₴	
Total		7 783 785 ₴	

DESIGNER

Bonuses_Table

Field Name	Data Type	Description (Optional)
Bonus_ID	AutoNumber	
Employee_ID	Number	
Bonus_Amount	Currency	

Field Properties

General | Lookup

Field Size	Long Integer
New Values	Increment
Format	
Caption	
Indexed	Yes (No Duplicates)
Text Align	General

A field name can be up to 64 characters long, including spaces. Press F1 for help on field names.

Property Sheet

Selection type: Table Properties

General

Read Only When Disconnected	No
Subdatasheet Expanded	No
Subdatasheet Height	0cm
Orientation	Left-to-Right
Description	
Default View	Datasheet
Validation Rule	
Validation Text	
Filter	
Order By	
Subdatasheet Name	[Auto]
Link Child Fields	
Link Master Fields	
Filter On Load	No
Order By On Load	Yes

Deductions Table

PREVIEW

Deductions_Table

Deduction_ID	Employee_ID	Deduction_Amount	Click to Add
1	Adam	20 ₴	
2	Ruth	400 ₴	
3	Micah	7 ₴	
(New)		0 ₴	
Total		427 ₴	

DESIGNER

Field Name	Data Type	Description (Optional)
Deduction_ID	AutoNumber	
Employee_ID	Number	
Deduction_Amount	Currency	

Field Properties

General | Lookup

Field Size	Long Integer
New Values	Increment
Format	
Caption	
Indexed	Yes (No Duplicates)
Text Align	General

A field name can be up to 64 characters long, including spaces. Press F1 for help on field names.

Property Sheet

Selection type: Table Properties

General

Read Only When Disconnected	No
Subdatasheet Expanded	No
Subdatasheet Height	0cm
Orientation	Left-to-Right
Description	
Default View	Datasheet
Validation Rule	
Validation Text	
Filter	
Order By	
Subdatasheet Name	[Auto]
Link Child Fields	
Link Master Fields	
Filter On Load	No
Order By On Load	Yes

Department Table

PREVIEW

Department_ID	Department_Name	Click to Add
1	Office	
2	Field	
(New)		

Record: 1 of 2 — No Filter — Search

DESIGNER

Department_Table

Field Name	Data Type	Description (Optional)
Department_ID	AutoNumber	
Department_Name	Short Text	

Field Properties

General | Lookup

Field Size	Long Integer
New Values	Increment
Format	
Caption	
Indexed	Yes (No Duplicates)
Text Align	General

A field name can be up to 64 characters long, including spaces. Press F1 for help on field names.

Selection type: Table Properties

General

Read Only When Disconnected	No
Subdatasheet Expanded	No
Subdatasheet Height	0cm
Orientation	Left-to-Right
Description	
Default View	Datasheet
Validation Rule	
Validation Text	
Filter	
Order By	
Subdatasheet Name	[Auto]
Link Child Fields	
Link Master Fields	
Filter On Load	No
Order By On Load	Yes

Employee Table

PREVIEW

Employee_ID	Employee_Name	Employee_Gender	Employee_Position	Click to Add
1	Adam	Male	Clerk	
2	Eve	Female	Manager	
3	Abraham	Male	Installer	
4	Ruth	Female	Supervisor	
5	Isaac	Male	Clerk	
6	Jacob	Male	Manager	
7	Daniel	Male	Installer	
8	Matthew	Male	Supervisor	
9	Mark	Male	Clerk	
10	Luke	Male	Manager	
11	John	Male	Installer	
12	Solomon	Male	Supervisor	
13	Micah	Male	Installer	
(New)				

Record: 1 of 13   No Filter   Search

DESIGNER

Employee_Table

Field Name	Data Type	Description (Optional)
Employee_ID	AutoNumber	
Employee_Name	Short Text	
Employee_Position	Number	
Employee_Gender	Short Text	

Field Properties

General | Lookup

Field Size	Long Integer
New Values	Increment
Format	
Caption	
Indexed	Yes (No Duplicates)
Text Align	General

A field name can be up to 64 characters long, including spaces. Press F1 for help on field names.

General

Read Only When Disconnected	No
Subdatasheet Expanded	No
Subdatasheet Height	0cm
Orientation	Left-to-Right
Description	
Default View	Datasheet
Validation Rule	
Validation Text	
Filter	
Order By	
Subdatasheet Name	[Auto]
Link Child Fields	
Link Master Fields	
Filter On Load	No
Order By On Load	Yes

Payroll Table

PREVIEW

Payroll_Table

Payroll_ID	Employee_ID	Monthly_Salary	Total_Tax_Rate	Bonuses	Deductions	Current_Dat	Total_Tax	Net_Pay	Click to Add
6	Adam	12 000,0 ₴	0,0%	2 877 ₴	20 ₴	01.05.2024	2 340,0 ₴	12 517,0 ₴	
7	Adam	12 000,0 ₴	0,0%	2 877 ₴	20 ₴	01.05.2024	2 340,0 ₴	12 517,0 ₴	
8	Adam	12 000,0 ₴	1950,0%	2 877 ₴	20 ₴	01.05.2024	2 340,0 ₴	12 517,0 ₴	
9	Adam	12 000,0 ₴	20,0%	2 877 ₴	20 ₴	01.05.2024	2 340,0 ₴	12 517,0 ₴	
10	Adam	12 000,0 ₴	19,5%	2 877 ₴	20 ₴	01.05.2024	2 340,0 ₴	12 517,0 ₴	
11	Adam	12 000,0 ₴	19,5%	2 877 ₴	20 ₴	01.05.2024	2 340,0 ₴	12 517,0 ₴	
12	Adam	12 000,0 ₴	19,5%	2 877 ₴	20 ₴	01.05.2024	2 340,0 ₴	12 517,0 ₴	
13	Eve	16 000,0 ₴	19,5%	0 ₴	0 ₴	01.05.2024	3 120,0 ₴	12 880,0 ₴	
14	Micah	14 000,0 ₴	19,5%	77 ₴	7 ₴	01.05.2024	2 730,0 ₴	11 340,0 ₴	
15	Micah	14 000,0 ₴	19,5%	77 ₴	7 ₴	21.05.2024	2 730,0 ₴	11 340,0 ₴	
16	Adam	12 000,0 ₴	19,5%	2 877 ₴	20 ₴	21.05.2024	2 340,0 ₴	12 517,0 ₴	
17	Ruth	18 000,0 ₴	19,5%	1 200 ₴	400 ₴	21.05.2024	3 510,0 ₴	15 290,0 ₴	
(New)		0,0 ₴	0,0%	0 ₴	0 ₴	21.05.2024	0,0 ₴	0,0 ₴	

Record: 1 of 12   No Filter   Search

Payroll_Table			
Field Name	**Data Type**	**Description (Optional**	
Payroll_ID	AutoNumber		
Employee_ID	Number		
Monthly_Salary	Currency		
Total_Tax_Rate	Number		
Bonuses	Currency		
Deductions	Currency		
Current_Date	Date/Time		
Total_Tax	Currency		
Net_Pay	Currency		

Field Properties

General | Lookup

Field Size	Long Integer
New Values	Increment
Format	
Caption	
Indexed	Yes (No Duplicates)
Text Align	General

A field name can be up to 64 characters long, including spaces. Press F1 for help on field names.

General

Read Only When Disconnected	No
Subdatasheet Expanded	No
Subdatasheet Height	0cm
Orientation	Left-to-Right
Description	
Default View	Datasheet
Validation Rule	
Validation Text	
Filter	
Order By	
Subdatasheet Name	[Auto]
Link Child Fields	
Link Master Fields	
Filter On Load	No
Order By On Load	Yes

Position Table

PREVIEW

Position_Table				
Position_ID	Position_Name	Position_Monthly_Salary	Position_Department	Click to Add
1	Clerk	12 000 ₴	Office	
2	Manager	16 000 ₴	Office	
3	Installer	14 000 ₴	Field	
4	Supervisor	18 000 ₴	Field	
(New)		0 ₴		

Record: |◀ ◀ 1 of 4 ▶ ▶| ▶※   No Filter   Search

Field Name	Data Type	Description (Optional)
Position_ID	AutoNumber	
Position_Name	Short Text	
Position_Department	Number	
Position_Monthly_Salary	Currency	

Field Properties

General Lookup

Field Size	Long Integer
New Values	Increment
Format	
Caption	
Indexed	Yes (No Duplicates)
Text Align	General

A field name can be up to 64 characters long, including spaces. Press F1 for help on field names.

General

Read Only When Disconnected	No
Subdatasheet Expanded	No
Subdatasheet Height	0cm
Orientation	Left-to-Right
Description	
Default View	Datasheet
Validation Rule	
Validation Text	
Filter	
Order By	
Subdatasheet Name	[Auto]
Link Child Fields	
Link Master Fields	
Filter On Load	No
Order By On Load	Yes

Tax Rate Table

PREVIEW

Tax_ID	Tax_Type	Tax_Rate	Click to Add
1	Military	6,0%	
2	Social Security	3,5%	
3	Income	8,0%	
4	Local	2,0%	
(New)		0,0%	

Record: 1 of 4   No Filter   Search

DESIGNER

Tax_Rate_Table

Field Name	Data Type	Description (Optional)
Tax_ID	AutoNumber	
Tax_Type	Short Text	
Tax_Rate	Number	

Field Properties

General | Lookup

Field Size	Long Integer
New Values	Increment
Format	
Caption	
Indexed	Yes (No Duplicates)
Text Align	General

A field name can be up to 64 characters long, including spaces. Press F1 for help on field names.

General

Read Only When Disconnected	No
Subdatasheet Expanded	No
Subdatasheet Height	0cm
Orientation	Left-to-Right
Description	
Default View	Datasheet
Validation Rule	
Validation Text	
Filter	
Order By	
Subdatasheet Name	[Auto]
Link Child Fields	
Link Master Fields	
Filter On Load	No
Order By On Load	Yes

Запити

New Payroll Record Query

DESIGNER

SQL

```sql
INSERT INTO Payroll_Table (
    Employee_ID,
    Monthly_Salary,
    Total_Tax_Rate,
    Total_Tax,
    Bonuses,
    Deductions,
    Net_Pay,
    [Current_Date]
)
SELECT [Forms]![Employee_Form]![Employee_ID] AS Expr1,
    [Forms]![Employee_Form]![Monthly_Salary_Input] AS Expr2,
    [Forms]![Employee_Form]![Total_Tax_Rate_Input] AS Expr3,
    [Forms]![Employee_Form]![Total_Tax_Input] AS Expr4,
    [Forms]![Employee_Form]![Total_Bonuses_Input] AS Expr5,
    [Forms]![Employee_Form]![Total_Deductions_Input] AS Expr6,
    [Forms]![Employee_Form]![Net_Income_Input] AS Expr7,
    Date() AS Expr8;
```

Employee Data Query

DESIGNER

SQL
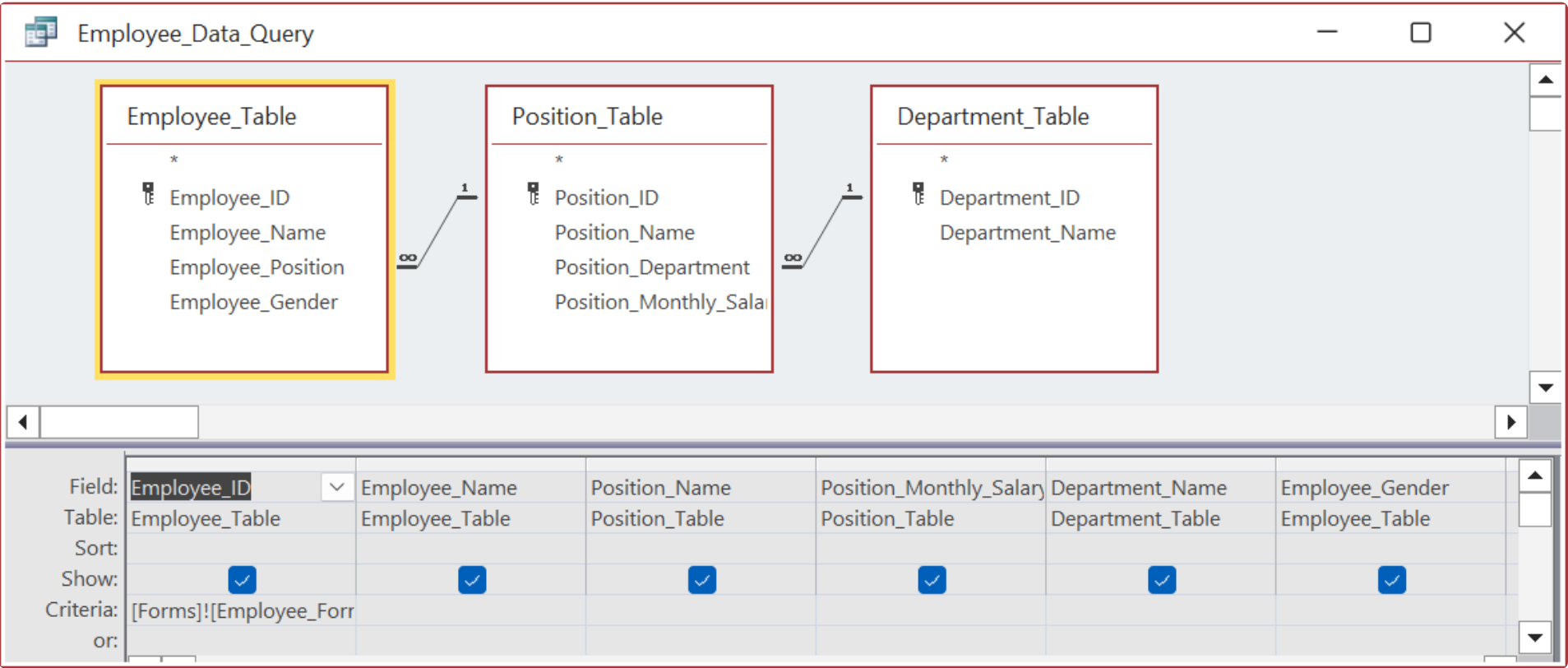
```sql
SELECT Employee_Table.Employee_ID,
  Employee_Table.Employee_Name,
  Position_Table.Position_Name,
  Position_Table.Position_Monthly_Salary,
  Department_Table.Department_Name,
  Employee_Table.Employee_Gender
FROM (Department_Table
  INNER JOIN Position_Table
    ON Department_Table.Department_ID = Position_Table.Position_Department)
  INNER JOIN Employee_Table
    ON Position_Table.Position_ID = Employee_Table.Employee_Position
WHERE (Employee_Table.Employee_ID) = [Forms]![Employee_Form]![Employee_ID_Input];
```

Total Tax Rate Query

DESIGNER

SQL

```sql
SELECT Sum([Tax_Rate]) AS Total_Tax_Rate
FROM Tax_Rate_Table;
```

Форми

Bonuses Form

Preview

Bonus_ID	Employee_ID	Bonus_Amount
1	Abraham	700 ₴
2	Ruth	1 200 ₴
3	John	1 000 ₴
4	Solomon	7 777 777 ₴
5	Adam	1 600 ₴
6	Adam	1 200 ₴
7	Adam	77 ₴
8	Daniel	77 ₴
9	Jacob	77 ₴
10	Micah	77 ₴
(New)		0 ₴

Bonuses_Sheet_Form

DESIGNER

Bonuses_Form

Form Header

Bonuses Sheet

Detail

| Bonus_ID | Employee_ID | Bonus_Amount |

| Bonus_ID | Employee_ ▾ | Bonus_Amount |

Form Footer

Total Bonuses ₴

=Nz(Sum([Bonus

Deductions Form

Deductions_Sheet_Form

Deduction_ID ▾	Employee_ID ▾	Deduction_Amount ▾
1	Adam	20 ₴
2	Ruth	400 ₴
3	Micah	7 ₴
＊ (New)		0 ₴

Employee Data Form

Employee_ID ▾	Employee_Name ▾	Position_Name ▾	Position_Monthly_Salary ▾	Department_Name ▾	Employee_Gender ▾
1	Adam	Clerk	12 000 ₴	Office	Male
5	Isaac	Clerk	12 000 ₴	Office	Male
9	Mark	Clerk	12 000 ₴	Office	Male
2	Eve	Manager	16 000 ₴	Office	Female
6	Jacob	Manager	16 000 ₴	Office	Male
10	Luke	Manager	16 000 ₴	Office	Male
3	Abraham	Installer	14 000 ₴	Field	Male
7	Daniel	Installer	14 000 ₴	Field	Male
11	John	Installer	14 000 ₴	Field	Male
13	Micah	Installer	14 000 ₴	Field	Male
4	Ruth	Supervisor	18 000 ₴	Field	Female
8	Matthew	Supervisor	18 000 ₴	Field	Male
12	Solomon	Supervisor	18 000 ₴	Field	Male
*	(New)				

Record: I◀ ◀ 1 of 13 ▶ ▶I ▶* 🔽 No Filter   Search

DESIGNER

Employee_Data_Form

Employee ID	Name	Position Name	Monthly Salary	Department Name	Gender
Employee_ID	Emplo	Position_Name	Position_Month	Department_Name	Empl

Form Header / Detail / Form Footer

Employee Form

PREVIEW

Employee_Form

Employee ID	1
Name	Adam
Gender	Male
Position	1
Position Name	Clerk
Department	Office

Save **Refresh**

Bonuses

Bonus_ID	Employee_ID	Bonus_Amount
5	Adam	1 600 ₴
6	Adam	1 200 ₴
7	Adam	77 ₴
(New)	Adam	0 ₴

Total Bonuses Amount ₴ 2 877 ₴

Deductions

Deduction_ID	Employee_ID	Deduction_Amount
1	Adam	20 ₴
(New)	Adam	0 ₴

Total Deductions Amount ₴ 20 ₴

Current Tax Rates

Tax_ID	Tax_Type	Tax_Rate
1	Military	6,0%
2	Social Security	3,5%
3	Income	8,0%
4	Local	2,0%
(New)		0,0%

Total Tax Rate %	Position Monthly Salary ₴	Total Tax Amount ₴	Total Clean Income ₴	Current Month
19,5%	12 000 ₴	2 340,0 ₴	12 517,0 ₴	травень 2024

Pay Income **View Taxes Report**

Payrolls

Pay	Employe	Monthly_Salary	Total_Tax_Rate	Total_Tax	Bonuses	Deductions	Total Sala	Current_Date	Payslip
6	Adam	12 000,0 ₴	0,0%	2 340,0 ₴	2 877 ₴	20 ₴	12 517,0 ₴	01.05.2024	Print Slip
7	Adam	12 000,0 ₴	0,0%	2 340,0 ₴	2 877 ₴	20 ₴	12 517,0 ₴	01.05.2024	Print Slip
8	Adam	12 000,0 ₴	1950,0%	2 340,0 ₴	2 877 ₴	20 ₴	12 517,0 ₴	01.05.2024	Print Slip
9	Adam	12 000,0 ₴	20,0%	2 340,0 ₴	2 877 ₴	20 ₴	12 517,0 ₴	01.05.2024	Print Slip
10	Adam	12 000,0 ₴	19,5%	2 340,0 ₴	2 877 ₴	20 ₴	12 517,0 ₴	01.05.2024	Print Slip
11	Adam	12 000,0 ₴	19,5%	2 340,0 ₴	2 877 ₴	20 ₴	12 517,0 ₴	01.05.2024	Print Slip
12	Adam	12 000,0 ₴	19,5%	2 340,0 ₴	2 877 ₴	20 ₴	12 517,0 ₴	01.05.2024	Print Slip
16	Adam	12 000,0 ₴	19,5%	2 340,0 ₴	2 877 ₴	20 ₴	12 517,0 ₴	21.05.2024	Print Slip
(New)	Adam	0,0 ₴	0,0%	0,0 ₴	0 ₴	0 ₴	0,0 ₴	21.05.2024	Print Slip

Record: 1 of 8 No Filter Search

New Employee **Previous Employee** **Next Employee**

Record: 1 of 13 No Filter Search

Employee_Form

Form Header

Employee ID | Employee_ID

Name | Employee_Name

Gender | Employee_Gender

Position | Employee_Position

Position Name | sition_Name]

Department | partment_Name]

Save **Refresh**

Detail

Bonuses

Form Header

Bonuses Sheet

Total Bonuses Amount ₴ | =0+[Bonuses_Sheet_Form].[Form]![Total_Bon

Deductions

Form Header

Deductions Sheet

Total Deductions Amount ₴ | =0+[Deductions_Sheet_Form].[Form]![Tota

Current Tax Rates

Form Header

Tax Rates Sheet

Detail

Total Tax Rate % | Position Monthly Salary ₴ | Total Tax Amount ₴ | Total Clean Income ₴ | Current Month
=[Tax_Rate_Shee | =[Fetch_Employee_Inforn | =[Monthly_Salary_Ir | =[Monthly_Salary_Inp | =Format(Date(

Pay Income **View Taxes Report**

Payrolls

Form Header

Payrolls Sheet

Detail

Payroll_ID	Employee_ID	Monthly_Salary	Total_Tax_Rate	Total_Tax	Bonuses	Deductions	Total Salary Amount	Current_Date	Payslip
Payroll_ID	Employee_	Monthly_Salary	Total_Tax_Rate	Total_Tax	Bonuses	Deductions	Net_Pay	Current_Date	Unbound

Form Footer

Form Footer

New Employee **Previous Employee** **Next Employee**

Menu Form
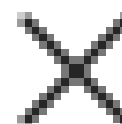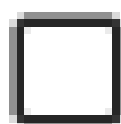
Employees

Payrolls

Taxes

Bonuses

Deductions

Employees' Data

Йоан 3:16

Detail

Employees

Payrolls

Taxes

Bonuses

Deductions

Employees' Data

Йоан 3:16

Payroll Form

Pay ▾	Employe ▾	Monthly_Salary ▾	Total_Tax_Rate ▾	Total_Tax ▾	Bonuses ▾	Deductions ▾	Total Sala ▾	Current_Date ▾	Payslip ▾
6	Adam	12 000,0 ₴	0,0%	2 340,0 ₴	2 877 ₴	20 ₴	12 517,0 ₴	01.05.2024	Print Slip
7	Adam	12 000,0 ₴	0,0%	2 340,0 ₴	2 877 ₴	20 ₴	12 517,0 ₴	01.05.2024	Print Slip
8	Adam	12 000,0 ₴	1950,0%	2 340,0 ₴	2 877 ₴	20 ₴	12 517,0 ₴	01.05.2024	Print Slip
9	Adam	12 000,0 ₴	20,0%	2 340,0 ₴	2 877 ₴	20 ₴	12 517,0 ₴	01.05.2024	Print Slip
10	Adam	12 000,0 ₴	19,5%	2 340,0 ₴	2 877 ₴	20 ₴	12 517,0 ₴	01.05.2024	Print Slip
11	Adam	12 000,0 ₴	19,5%	2 340,0 ₴	2 877 ₴	20 ₴	12 517,0 ₴	01.05.2024	Print Slip
12	Adam	12 000,0 ₴	19,5%	2 340,0 ₴	2 877 ₴	20 ₴	12 517,0 ₴	01.05.2024	Print Slip
13	Eve	16 000,0 ₴	19,5%	3 120,0 ₴	0 ₴	0 ₴	12 880,0 ₴	01.05.2024	Print Slip
14	Micah	14 000,0 ₴	19,5%	2 730,0 ₴	77 ₴	7 ₴	11 340,0 ₴	01.05.2024	Print Slip
15	Micah	14 000,0 ₴	19,5%	2 730,0 ₴	77 ₴	7 ₴	11 340,0 ₴	21.05.2024	Print Slip
16	Adam	12 000,0 ₴	19,5%	2 340,0 ₴	2 877 ₴	20 ₴	12 517,0 ₴	21.05.2024	Print Slip
17	Ruth	18 000,0 ₴	19,5%	3 510,0 ₴	1 200 ₴	400 ₴	15 290,0 ₴	21.05.2024	Print Slip
* (New)		0,0 ₴	0,0%	0,0 ₴	0 ₴	0 ₴	0,0 ₴	21.05.2024	Print Slip

Record: I◀ ◀ 1 of 12 ▶ ▶I ▶* No Filter   Search

Tax Rate Form

Tax_Rate_Form

Form Header

Tax Rates Sheet

Detail

Tax_ID	Tax_Type	Tax_Rate
Tax_ID	Tax_Type	Tax_Rate

Form Footer

Total Tax Rate %

=Sum([Tax_Rate]

Звіти

Employee Data Report

PREVIEW

Employee_Data_Report

ID	Name	Position	Monthly Salary	Department Name	Gender
1	Adam	Clerk	12 000 ₴	Office	Male

DESIGNER

Employee_Data_Report — □ ×

' I ' 1 ' I ' 2 ' I ' 3 ' I ' 4 ' I ' 5 ' I ' 6 ' I ' 7 ' I ' 8 ' I ' 9 ' I ' 10 ' I ' 11 ' I ' 12 ' I ' 13 ' I ' 14 ' I ' 15 ' I ' 16 '

Report Header

| ID | Name | Position | Monthly Salary | Department Name | Gender |

Page Header

Detail

| Empl | Employee_Name | Position_Name | Position_Month | Department_Name | Emplo ∨ |

Page Footer

Report Footer

Payroll Report

PREVIEW

Employee_Data_Report — □ ×

' I ' 1 ' I ' 2 ' I ' 3 ' I ' 4 ' I ' 5 ' I ' 6 ' I ' 7 ' I ' 8 ' I ' 9 ' I ' 10 ' I ' 11 ' I ' 12 ' I ' 13 ' I ' 14 ' I ' 15 ' I ' 16 '

Report Header

| ID | Name | Position | Monthly Salary | Department Name | Gender |

Page Header

Detail

| Empl | Employee_Name | Position_Name | Position_Month | Department_Name | Emplo ∨ |

Name	Ruth
Gender	Female
Position	Supervisor
Department	Field

Monthly Pay	18 000,0 ₴
Tax Rate	19,5%
Tax	3 510,0 ₴
Bonuses	1 200 ₴
Deductions	400 ₴
Salary	15 290,0 ₴
Date	21.05.2024

Preview   **Print**

Page 1 of 1

Payroll_Report

' | ' 1 ' | ' 2 ' | ' 3 ' | ' 4 ' | ' 5 ' | ' 6 ' | ' 7

Report Header

Name	Report]![Employee_Name]
Gender	ort]![Employee_Gender]
Position	Report]![Position_Name]
Department	Department_Name]

Page Header

Detail

Monthly Pay	Monthly_Salary
Tax Rate	Total_Tax_Rate
Tax	Total_Tax
Bonuses	Bonuses
Deductions	Deductions
Salary	Net_Pay
Date	Current_Date

| **Preview** | **Print** |

Page Footer

Page " & [Page] & " of " & [Pages]

Tax Rate Report

PREVIEW

Tax Rate Report

Type **Military**

Rate 6,0%

Type **Social Security**

Rate 3,5%

Type **Income**

Rate 8,0%

Type **Local**

Rate 2,0%

21 травня 2024 р.

Designer

Макроси

Close Employee Form Macro

Close Payroll Form Macro

Close Payroll Report Macro

Close_Payroll_Report_Macro

⚠️ **CloseWindow**

Object Type   Report

Object Name   Payroll_Report

Save   Yes

➕ Add New Action ⌄