

Lesson 11 - Date and Time Functions & Financial Functions

Task: Create a table with 7 columns in a single DAX query.

Table should consist of:

1. The previous and the next 7 days from the current date
2. Name of the day (Friday, Saturday, etc.)
3. Name of the day in Uzbek
4. Year Number of the day
5. Month Name
6. Day number
7. Fiscal quarter, considering fiscal year starting in October

Solution DAX Code:

```
DateTable := VAR CurrentDate = TODAY() VAR DateRange = ADDCOLUMNS ( CALENDAR (
CurrentDate - 7, CurrentDate + 7 ), "DayName", FORMAT ( [Date], "dddd" ),
"DayName_Uz", SWITCH ( FORMAT ( [Date], "dddd" ), "Monday", "Dushanba", "Tuesday",
"Seshanba", "Wednesday", "Chorshanba", "Thursday", "Payshanba", "Friday", "Juma",
"Saturday", "Shanba", "Sunday", "Yakshanba" ), "YearNumberOfDay", FORMAT ( [Date],
"yyyy" ) & "-" & FORMAT ( [Date], "DDD" ), "MonthName", FORMAT ( [Date], "MMMM" ),
"DayNumber", DAY ( [Date] ), "FiscalQuarter", "Q" & ROUNDUP ( MOD ( MONTH ( [Date] )
- 10, 12 ) / 3 + 1, 0 ) ) RETURN DateRange
```

Explanation: 1. CALENDAR() generates dates from 7 days before to 7 days after TODAY(). 2. DayName returns full weekday name in English. 3. DayName_Uz translates day names to Uzbek using SWITCH. 4. YearNumberOfDay combines the year and the day of year. 5. MonthName gives full month name. 6. DayNumber returns the day of month. 7. FiscalQuarter is calculated assuming fiscal year starts in October.