TASK 1: Delivery problem

The flat file that you received with this problem statement contains transactional and master data.
The content is anonymized/transformed where needed.

You will be evaluated by the following criteria:
-Clarity and quality of the code.
-How you deal with ambiguity.
-Problem solving ability.
-How you expose your ideas in a document and your ability to present the case to the interviewers, if chosen.

Build a predictor that informs whether a payment occurs ahead of time, on time or if it's delayed.
Consider that a payment is on time if it occurs within the same month of the due date.

TASK 2: SQL

Table name: Customer

CUSTOMER	COUNTRY	INDUSTRY
C1	DE	AUTOMOTIVE
C2	DE	AUTOMOTIVE
C3	DE	HEALTHCARE
C4	IT	HEALTHCARE
C5	EN	HEALTHCARE
C6	EN	HEALTHCARE

Table name: Sales

SALE_ID	INVOICE_TOTAL	CUSTOMER_ID	SALE_DATE
S1	10	C1	20.04.2016
S2	56	C2	20.04.2016
S3	115	C2	20.04.2016
S4	120	C1	20.05.2016
S5	9	C4	20.02.2016

a) Write a SQL query that displays the number of customers per industry.

b) Write a SQL query that displays the average invoice total per industry.

c) Write a SQL query that displays what each customer spent per month, if that value is bigger than 100.

d) Write a SQL query that ranks clients within Industry based on respective sales total.