

XY Associates is a business that deals in car park management. They have a number of parking spaces where car owners can leave their cars at a fee. Below are the conditions used for setting the fee to be paid for each car

- The size range of the car. There are three categories. Small, medium and Big
- The bigger the car, the higher the amount to be paid
- If the car spends more than 9 hours in a single day, the client pays 89% of the total fee.
- A car accumulates free parking hours if in 7 consecutive days it accumulates over 30% the total number of hours (in 7 days). The free days are equivalent to 10% of the total number of parking hours that accumulated the free days. The free hours are given immediately the 7 days elapse.
- Details of Cars with the highest number of parking hours in a month are displayed for recognition
- Payment is made only when the car is removed from parking

Assignment: Write **ONLY ONE** servlet (and no HTML OR JSP files) that will help the above company perform the above functions. You may have stylesheets. The servlet should also do the following

- Register parking yards/Spaces giving their locations, show the registered ones and edit what is added. No deleting should be allowed.
- Display a graphical view of a selected parking yard/space. Showing the filled spaces and the vacant ones. E.g. The figure below shows cars parked. (Hint: use a <table> to generate the parking space. Acquire car images of big, small and medium to populate the parking space.)
- Enable one to enter the car details, parking fees for each hour, add parking yards and remove or add cars to a given parking space and all the above functions.
- Show which parking space is making the highest profits
- **Upload your .sql file for your database when submitting** the work
-

