NU parkin system in C

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- Problem: car parking system to calculate the fee and see the spots if it's available or not.
- implementation Details:
    1. 1st function initialize_parking_slot to initialize the slots and set the empty slots to 0.
    2. 2nd function history_of_park to record every car parked in our park and save it in a file as an example : car with license plate 23 in spot 2 parked for 15 hours must pay 15 pounds.
    3. 3rd function history_of_remove to record every car removed from our parking system and calculate the fee.
    4. 4th function park this function responsible for parking the vehicle in the parking slot and calculate the cost based on the type of the vehicle.
    5. 5th function search this function responsible for finding the spot number of the vehicle parked in parking slot based on the license number.
    6. 6th function remove_vehicle removing a vehicle from the parking slot based on license number and record the remove in a file.
    7. 7th function display_parking_lot display the current status of the parking slot and which slot is empty and which is occupied.
    8. 8th function check_spot check the status of specific parking spot in the parkin.
    9. 9th function number_of_vehicles_parked count and display the total number of vehicles currently in the park.
    10. 10th function number_of_type_parked display the total number of vehicles of a specific type currently parked in the parking
    11. 11th function history reads and display the contents of the file contains a record of the parking history.
    12. 12th function menu display the main menu of the parking system.
    13. 13th function main declare some variables and contain the

switch cases.

❖ Test and result

❖ The user type 1 to park his vehicle then type his vehicle license then type the vehicle type which is car at this case , and type how long he will park in the parking.

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                    Welcome to BTATS Garage!
What do you want to do?:
1. Park a vehicle
2. Remove a vehicle
3. search a vehicle
4. check a spot
5. Number of Vehicles in the garage
6. Number of Vehicles of a specific type in the garage
7. Display parking lot status
8. History
9. Exit
What do you want to do?1
Enter the vehicle's license plate: 23
Enter the vehicle's type (car, bus or motorcycle):car
How long will you park your car? (minimum is 1 hour)?
 Enter in time hours:
2
vehicle with license plate 23 parked at spot 1.
Total cost for parking is: 10 pounds
```