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"""
CS241 Team Activity 07
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"""

from abc import ABC
from abc import abstractmethod

### Abstract Class for common attributes of any employee
class Employee(ABC):

   ### Initialize the Employee object
   def __init__(self):
      self.name = ""

   ### Display the employee
   @abstractmethod
   def display(self):
      print(self.name)

   ### Determine the paycheck amount
   @abstractmethod
   def get_paycheck(self):
      pass


### Hourly Employee that derives from the Employee base class
### Must implement display and get_paycheck
class HourlyEmployee(Employee):

   ### Initialize the hourly employee object
   def __init__(self):
      super().__init__()
      self.hourly_wage = 0.0
      self.hours = 0.0

   ### Display the employee
   def display(self):
      print("{} - ${:.2f}/hour" .format(self.name, self.hourly_wage))

   ### Paycheck is based on wage and number of hours worked
   def get_paycheck(self):
      return self.hourly_wage * self.hours


### Salary Employee that derives from the Employee base class
### Must implement display and get_paycheck
class SalaryEmployee(Employee):

   ### Initialize the salary employee object
   def __init__(self):
      super().__init__()
      self.salary = 0.0

   ### Display the employee
   def display(self):
      print("{} - ${:.2f}/year" .format(self.name, self.salary))

   ### Paycheck is based on being paid twice a month
   def get_paycheck(self):
      return self.salary / 24.0

### Display employee information including name, pay details, and
### paycheck amount.  This demonstrates polymorphisim.
def display_employee_data(employee):
   employee.display()
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    print("Payheck ${:.2f}" .format(employee.get_paycheck()))

### Provide menu to keep track of a list of employees
def main():
    employees = []
    selection = ""
    while selection != "q":
        print("Menu")
        print("h) Add hourly")
        print("s) Add salary")
        print("q) Quit")
        selection = input("> ")
        if selection == "h":
            employee = HourlyEmployee()
            employee.name = input("Name: ")
            employee.hourly_wage = float(input("Hourly Rate: "))
            employee.hours = float(input("Hours: "))
            employees.append(employee)
        elif selection == "s":
            employee = SalaryEmployee()
            employee.name = input("Name: ")
            employee.salary = float(input("Salary: "))
            employees.append(employee)
    print()
    for employee in employees:
        display_employee_data(employee)

if __name__ == "__main__":
    main()

```