Lab 12 – Motivation for Inheritance.

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 4. 1. What attributes are the same between the Salaried and Hourly workers?

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|  private String name;  private String SSN;  private int exemptions;  private double wage;  private double hours; |
| Are there any that are different? No they are all the same. |

4. 2. What methods are the same in name between the Salaried and Hourly workers?

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| pay and toString |

 4. 3. Which methods do the same thing? Which methods do different things?

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| toSring is the same and pay is different |

 4. 8. How many individual statements did you need to add to SalariedWorker and HourlyWorker collectively?

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| 6 |

 4. 10. Did this change require any changes to your SalariedWorker class?

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| no |

 5. 1. In which class are these located?

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| Employee |

5. 2. Are these attributes found anywhere in any of the other three classes?

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| In the constructur |

 5. 3. Look at the SalariedWorkerV2.java class. Does it contain any attributes of its own?

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| no |

 5. 4. What do you see that might "link" SalariedWorkerV2.java to the Employee.java class?

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| public class SalariedWorkerV2 extends Employee |

5. 5. How about HourlyWorkerV2? Does it contain any attributes? Does it also link to the Employee.java class?

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| HourlyWorkerV2 does not contain any attributes because all the attributes are in the parent class. HourlyWorkerV2 extends Emploee so yes. |

 5. 7. In HRV2, do you see any objects of the "Employee" type?

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| No if you have objects that are HourlyWorkerV2 then they are Employee as well.  |

 5. 8. In HRV2, we are building the more specific versions of Employee, the HourlyWorkerV2 or SalariedWorkerV2. Looking at the methods in Employee, what method does not exist in Employee.java that does exist in each of the two specializations?

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| pay() |

 5. 9. What methods exist in Employee.java that do not exist in each of the two specializations?

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| toString() |

 5. 10. Does this make sense? Why or why not?

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| It makes sense because the toString method will be the same for each child class so they don’t need to have their own toString methods. |

 6. 1. Where would you add this same field to your Employee.java family of classes?

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| It would be added to the Employee class with the other fields. |
|  Where would you change the toString()? In the Employee class |
|  What constructors do you need to change?All of the constructors. |

6. 3. Does inheritance save you any coding?

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| Yes because method are inherited and do not have to be written again  |
| What would you say are the advantages and disadvantages of using an inheritance structure for a related set of classes?An advantages are that it saves coding and you can use the different methods without having them in the same class. Disadvantage is that it could get complicated if there are a lot of classes. |