This homework assignment has 3 problems, for a total of 34 points.

1. (12 points) Identify all of the following statements that are true about the basics of services.
   A. WSDL allows using the standard types of XML Schema as types for results of operations
   B. UDDI provides a natural means to accommodate trust in services and service providers
   C. We could use screen scraping on a Web page instead of Web services to obtain information, but we
      would have to contend with low-level details of layout to figure out how the information was meant to
      be structured
   D. A UDDI registry may be used to store information about SOAP services but not about REST services
   E. A number of software vendors support SOAP, not for use over the open Web, but to facilitate interoper-
      ating their applications with other applications within an enterprise
   F. An ESB provides an abstraction over infrastructure to support engaging services via messaging or HTTP

2. (10 points) Identify all of the following statements that are true about knowledge modeling, RDF, and OWL
   A. If we find two domains asserted for an RDF property, we treat the two domains as being unioned
      together
   B. If we find two domains asserted for an OWL property, we can infer that the two domains are equal
   C. If we make conflicting assertions in OWL within the same document, the last one to be read in wins out
   D. The main advantage of reification in RDF is to enable us to express three-party relationships in RDF
   E. OWL DL provides special means to deal with reified statements

3. (12 points) Consider a simple modeling situation from a health care setting. A medical professional (medico,
   for short) helps a patient; a patient is helpedBy a medico (helpedBy is an inverse of helps). A medico may be a
   physician or a nurse or a surgeon. A medico orders a test on a patient from a laboratory.
   A. We would assert that helps is an Inverse Functional Property to ensure that each patient is helpedBy
      exactly one medico
   B. If we assert that helps is an Inverse Functional Property, then helpedBy is automatically asserted to be
      a Functional Property
   C. We cannot define orders directly as an OWL property because it involves three parties: a medico, a
      patient, and a laboratory
   D. If we assert that medico is a superclass of both physician and surgeon, then physician and surgeon
      cannot be disjoint
   E. If we assert that medico is a superclass of physician, then we can send in a physician for a service
      (medical procedure) that requires a medico
   F. If we assert that medico is a superclass of both physician and surgeon, then we can send in a physician
      for a service (medical procedure) that requires a surgeon