Question 1

Go to Trade in Value Added (TiVA) website.

http://stats.oecd.org/Index.aspx?DataSetCode=TIVA2015_C1

Look at CONS_VASH: Value Added Share of Total Consumption, by Source Country and Industry

⇥ **Indicator**	CONS_VASH: Value added share of total consumption, by source country and industry ⌄ ℹ
⇥ **Industry**	CTOTAL: TOTAL ⌄
⇥ **Partner**	USA: United States ⌄
Unit	Percentage

1.1) What percent of final consumption in the US is value added with the U.S. as the source country in 1995 and 2011?

1.2) What percent of U.S. final consumption is value added with China as the source country in 1995 and 2011?

1.3) What percent of U.S. final consumption in textiles is value added with China as the source country in 1995 and 2011?

1.4) Suppose the trade elasticity is 3 (the previous elasticity estimates we used were based on only manufacturing goods, which high higher elasticities). Compute welfare changes with your data from 1.1:

$$\Delta\text{Welfare} = \left(\frac{\text{Domestic Expenditure Share in 2011}}{\text{Domestic Expenditure Share in 1995}}\right)^{\frac{-1}{\text{Trade Elasticity}}}$$

How much did welfare increase/decrease according to trade from this simple measure?

1.5) Suppose that instead of using value added we just used exports/GDP. Exports/GDP went from 10.6% of GDP to 13.6% of GDP over 1995 to 2011. What is the change in welfare if we say domestic expenditure share is 1-Exports/GDP?

Question 2

Now, go to bea.gov website and navigate to the NIPA tables. [BEA -> Interactive Data -> Begin Using the Data -> Domestic Product and Income]

For each part below I will give the table that we are looking at. We will be downloading data for 1995 and 2011. [To see the data for those years, select Modify -> Annual -> First Year = 1995 and Last Year = 2011 -> Refresh Table]. Look at the Personal Consumption Expenditures Line

2.1) Go to **Table 1.1.5 Gross Domestic Product.** Look at the **Personal Consumption Expenditures Line**. What was the value of personal consumption expenditures in 1995 and 2011 in billions of dollars?

2.2) Go to **Table 1.10 Gross Domestic Product by Types of Income.** Look at the **Compensation of employees, paid** line. What was the value of consumption paid to employees in 1995 and 2011 in billions of dollars?

2.3) Go to **Table 1.1.4. Price Indexes for Gross Domestic Product.** Look at the Index on the lines for Personal consumption expenditures. What was the value of the PCE Price Index in 1995 and 2011?

2.4) Lastly, Use this table to get median usual earnings for workers in the U.S. ages 16 and over in 1995 and 2011 https://research.stlouisfed.org/fred2/release/tables?rid=332&eid=46626&od=2011-01-01#

2.5) Compute Welfare change for "average" person in U.S. between 1995 and 2011 using the income and price indices for 2011 and 1995.

$$\Delta \text{Welfare} = \left(\frac{\text{Income in 2011}}{\text{CPI in 2011}} \right) / \left(\frac{\text{Income in 1995}}{\text{CPI in 1995}} \right)$$

For which group does welfare increase the most? Does any group experience a decrease in welfare?

2.6) Now suppose that we expect technological progress to lead to a 2% average increase in welfare per year for the whole economy. How much would we expect welfare to grow between 2011 and 1995?

2.7) What is the ratio of "actual welfare change" from 2.5 to "expected welfare chage" from 2.6. Did any groups experience less welfare growth than expected?