Analyse the relationship between the Marshallian demand function and the Hicksian demand function.

Intro: analysing the relationship between the Marshallian and Hicksian demand function is important to microeconomics as it provides an opportunity to compare utility maximisation choices under alternative circumstances the demand functions provide a easy way of recording the results of the comparative static analysis.

A simple change in the consumers budget i.e. an increase or decrease in I involves a parallel shift of the budget line either inwards or outwards from the point of origin hence effecting the utility maximising choice of the individual. The change in I will also have a direct impact on the consumption level a rise in income will result in an increase in consumption of normal goods thus achieving higher utility. However it is also possible that as 'I' increases the consumption of some goods will decrease these are considered to be inferior goods. The economics of this is relatively simple as the shift in the budget constraint preserves the price ratio it typically has no effect on the individual Marginal Rate of Substitution.

The rise in price of one good holding constant both income and the price of other goods constant '**ceteris paribus**' has economically more complex effects. Geometrically this is because a change in price involves not only changing the position of the budget constraint but also its slope. Moving to a new utility maximising choice entails not only moving to another indifference curve but also changing the MRS. There are two effects, which come into the discussion. The 'Income Effect', due to the shift in the budget constraint outwards/inwards towards the origin for the good whose price has decreased/increased, in other words the consumer has become poorer. The second analytical effect is the 'Substitution effect'. In this case we are holding utility constant so the individual is still on the original indifference curve U1 however the commodity bundle point has changed. If the price of X falls the original commodity bundle is no longer the cheapest way to obtain the level of satisfaction on the original indifference curve. This person will take advantage and substitute good X for Y if he is to stay on U1 at minimal cost. Point B is now least costly most efficient commodity bundle. Only by making such a substitution can the new price ratio be equated to the individuals MRS as required for utility maximisation. The two effects tend to reinforce each other. For a reduction in price they both tend