**Algorithm Design Lab 1**

**Document Id 46**

**Questions**

Q1 Describe ‘local optimum’ w.r.t a Greedy Algorithm

Q2 for a Greedy Algorithm what is the relationship between the ‘local optimum’ and the ‘global optimum’ ?

Q3 Given that a Greedy Algorithm may produce a sub-optimal solution why would we want to use them ?

Q4 Give an example where a greedy solution would be sufficient

Q5 Give an example where a greedy solution would not be appropiate

**Practical Task Identify the optimised non overlapping segments**

For the following arrays of start and ednpoints creat code that Identify’s the optimised non overlapping segments. Note End points are not included as overlap points

int segmentStart[] = {2, 1, 4, 5};

int segmentEnd[] = {3, 9, 5, 8};