# Question 2

We know the opponent order and the times of rock, paper and scissor.

Like the figure below:

The algorithm idea is that reserve as many paper as possible to counter as many rock as possible and it is the same method for scissor and rock.

Firstly, using as many paper to counter the rock.

If , we will reserve the remaining paper

Else we will take rock to counter rock avoiding get minus points, therefore, the remaining rock is

Recording the points.

Then checking

If , there are remaining scissors

If not , we will use the remaining paper from previous part. If remaining paper is 0, we only remain rock.

Recording the points and add the previous part.

For the last part using remaining to counter .

Recording the points and adding.

Therefore, We get the maximum points and it is optimal solution.