我打不出上角标的圈，我就用0代表了

Q5 dim u + dim U0=dim V

Q6 : in Q4 we have a program calculating the basis of kernel

As U is the row space of A1, U=<row(1) row(2) ….> where row(i)s are the non-zero rows in the echelon form of A. And then, as suggested in the question, U0 is kerA, which we can find using program in Q4. Suppose U0=< v1 v2…>, then let M be a matrix in echelon form with row1=v1, row2=v2….so U0 is the row space of M then (U0)0 is kerM

Q7 ：basis of U,W:Q3的代码，然后我们可以找到U0，W0的basis，就像Q6里面那样，U0=kerA,W0=kerB. 然后我们就可以找到U0和W0的交集，题目里说U0且W0=（U+W）0，然后{（U+W）0}0=U+W 因为（U0）0=U。就找到U+W的basis了，同理可以找到U0+W0,然后U0+W0=（U且W）0，然后再0一次就找到U且W了，ie.{（U且W）0}0=U且W