Tutorial Four – 2GA3 – Computer Architecture - Sep 30, 2018

Question 1:

Implement the following C code in MIPS assembly.

```
void swap(int v[], int k) {
        int temp;
        temp = v[k];
        v[k] = v[k+1];
        v[k+1] = temp;
}
```

Question 2:

Implement the following C code in MIPS assembly.

```
int fib(int n){
if (n==0)
    return 0;
else if (n == 1)
     return 1;
else
     return fib(n−1) + fib(n−2);
```

Question 3 (Try at home- Optional):

Implement the following C code in MIPS assembly.

```
void sort (int v[], int n) {
        int i, j;
        for (i = 0; i < n; i += 1) {
                for (j = i – 1; j >= 0 && v[j] > v[j + 1]; j =1) {
                        swap(v,j);
                        }
                }
        }
```