**15CSE381 Computer Organization and Architecture Lab**

**Lab Sheet - 3**

**Convert the following C code to MIPS assembly code**

1. C procedure of recursive factorial:

int fact (int n)

{

if (n < 1)

return (1);

else

return (n \* fact(n-1));

}

1. C procedure for the procedure swap:

void swap(int v[], int k)

{

int temp;

temp = v[k];

v[k] = v[k+1];

v[k+1] = temp;

}

1. C procedure that performs a sort on the array v:

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);

}

}

}