```c
int
main(int argc, char *argv)
{
  printf("The factorial of 10 is %d\n",
         fact(10));
}

int
fact(int n)
{
  if (n<1) {
    return(1);
  }
  else {
    return(n*fact(n-1));
  }
}
```


```
main:         subu $sp, $sp, 32
              sw   $ra, 20($sp)
              sw   $fp, 16($sp)
              addu $fp, $sp, 28

              li   $a0, 10
              jal  fact

0x00400038    la   $a0, STRING
              move $a1, $v0
              jal  printf

              lw   $ra, 20($sp)
              lw   $fp, 16($sp)
              addu $sp, $sp, 32
              jr   $ra

fact:         subu $sp, $sp, 32
              sw   $ra, 20($sp)
              sw   $fp, 16($sp)
              addu $fp, $sp, 28
              sw   $a0, 0($fp)
              lw   $v0, 0($fp)
              bgtz $v0, L2
              li   $v0, 1
              j    L1

L2:           lw   $v1, 0($fp)
              subu $v0, $v1, 1
              move $a0, $v0
              jal  fact

0x0040008C    lw   $v1, 0($fp)
              mul  $v0, $v0, $v1

L1:           lw   $ra, 20($sp)
              lw   $fp, 16($sp)
              addu $sp, $sp, 32
              j    $ra
```