```
factorial(6)
fact_iter(1, 1, 6)
fact_iter(1, 2, 6)
fact_iter(2, 3, 6)
fact_iter(6, 4, 6)
fact_iter(24, 5, 6)
fact_iter(120, 6, 6)
fact_iter(720, 7, 6)
720
```