

Main.ash

```
main {
  //take input
  ——input——
  in
  jmp_i _ret; lbl _in = $$
  jmp _in
  storeir $input; lbl _ret = $$
  ——input——

  //call div
  call &ret51; lbl loop = $$
  push $input
  push $five
  jmp $div
  //output result
  outrn div.$return; lbl ret51 = $$
  //call mod
  call &ret52
  push $input
  push $five
  jmp $mod
  //assign result of mod to input
  loada mod.$return; lbl ret52 = $$
  storea $input

  //call div
  call &ret21
  push $input
  push $two
  jmp $div
  //output result
  outrn div.$return; lbl ret21 = $$
  //call mod
  call &ret22
  push $input
  push $two
  jmp $mod
  //assign result of mod to input
  loada mod.$return; lbl ret22 = $$
  storea $input

  //call div
  call &ret11
  push $input
  push $one
  jmp $div
  //output result
  outrn div.$return; lbl ret11 = $$
  //call mod
  call &ret12
  push $input
  push $one
  jmp $mod
  //assign result of mod to input
  loada mod.$return; lbl ret12 = $$
  storea $input
```


Header.ash

```
global {
  const fivet: int = 5000
  const twot: int = 2000
  const onet: int = 1000
  const ten: int = 10

  var five: int = fivet
  var two: int = twot
  var one: int = onet
  var input: int = later
}

func div(a: int, b: int) -> return: int {
  var r: int = later
  const one: int = 1
  var count: int = null
}

func mod(a: int, b: int) -> return: int {
  var r: int = later
}
```

