```
boolean primetest1(int n):

integer: i
boolean: isprime

if (n < 2) error
if (n == 2) return true

isprime = true

for i from 2 to n-1
    if n%i == 0
        isprime = false

return isprime
```

```
void primelist4(int n):
integer:
            i, j
            isprime
boolean:
arraylist<integer>: primelist
primelist.add(2)
for j from 3 to m:
        isprime = true
        for i from 0 to primelist.size()-1
                if j % primelist.get(i) == 0
                         isprime = false
                         break
        if isprime
                print "j is prime"
                primelist.add(j)
for i from 0 to primelist.size()-1
        print primelist.get(i) + " is prime"
return()
```