2021 Numerical Analysis Lab HW#1

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**1.Palindromic prime number**

program ppn

implicit none

integer :: sum, temp1, r, n, num, cnt, temp2

num = 1

cnt = 0

do

sum = 0

temp1 = num

do while(temp1>0)

r = mod(temp1,10)

sum = sum\*10+r

temp1 = temp1/10

end do

if(sum .eq. num) then

temp2 = prime(num)

if(temp2 == 1) then

cnt = cnt+1

if(cnt == 100) then

exit

end if

end if

end if

num = num+1

end do

print \*, "the 100th palindrome prime is", num

contains

integer function prime(n)

integer :: i,n

i = 1

do while(i < n)

if((mod(n,i) .eq. 0) .and. i/=1) then

prime = 0

exit

else

prime = 1

end if

i = i+1

end do

end function

end program

텍스트, 시계, 어두운, 장치이(가) 표시된 사진

자동 생성된 설명

**2. Trace**

program trace

implicit none

integer :: j,k,temp,m,n, a(1000,1000)

read(\*,\*) m, n

do j=1,m

do k=1,n

read(\*,\*) temp

a(j,k) = temp

end do

print \*, "--------------"

end do

print \*, sum\_is(a)

contains

integer function sum\_is(dim)

integer :: sum = 0, dim(1000, 1000), i

if(m<n) then

do i=1, m

sum = sum + dim(i, i)

end do

else

do i=1, n

sum = sum + dim(i,i)

end do

end if

sum\_is = sum

end function sum\_is

END PROGRAM trace

텍스트이(가) 표시된 사진

자동 생성된 설명