

プログラミング言語 第六回練習問題回答

篠沢佳久
櫻井彰人

練習問題①

```
# coding: Windows-31J
5.times{ |i|
  print( i*2+1, "%n" )
}

(0..4).each{ |i|
  print( i*2+1, "%n" )
}
```

```
i=0
loop{
  print( i*2+1, "%n" )
  i += 1
  break if i >= 5
}
```

練習問題② (timesの場合)

```
total = 0
100.times{ |i|
  total = total + (i+1)**2
  # または total += (i+1)**2
}
print( total )
```

練習問題② (eachの場合)

```
total = 0
(1..100).each{ |i|
  total = total + i**2
  # または total += i**2
}
print( total )
```

練習問題③

```
# coding: Windows-31J

seki = 1
i = 0
loop{
  x = gets.chomp.to_i
  seki *= x
  i += 1
  break if i >= 5
}
print( "積は", seki, "です\n" )
```

練習問題④

```
print( " x   sin   cos  sin^2+cos^2\n" )
(0..10).each{ |i|
  x = i / 10.0 * Math::PI
  printf( "%8.5f %8.5f %8.5f %8.5f\n", x,
    Math.sin( x ), Math.cos( x ),
    Math.sin( x )**2.0 + Math.cos( x )**2.0 )
}
```

練習問題⑤

```
# coding: Windows-31J
```

```
flag = 0;
n=gets.chomp.to_i
(2..n-1).each { |i|
  if n % i == 0 then
    flag = 1
    break
  end
}
```

```
if flag == 0 then
  print( n , "は素数です\n" )
else
  print( n , "は素数ではありません\n" )
end
```