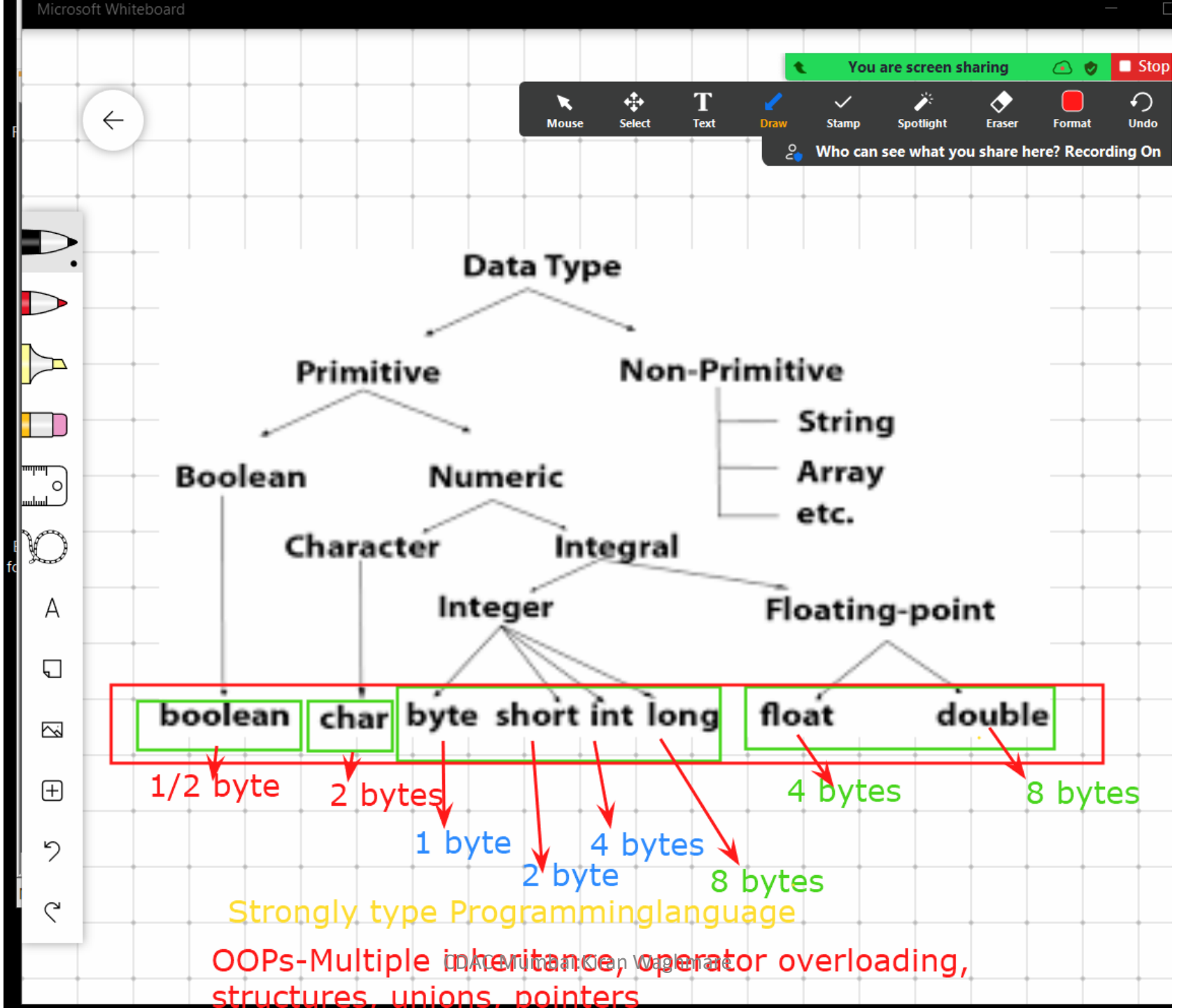
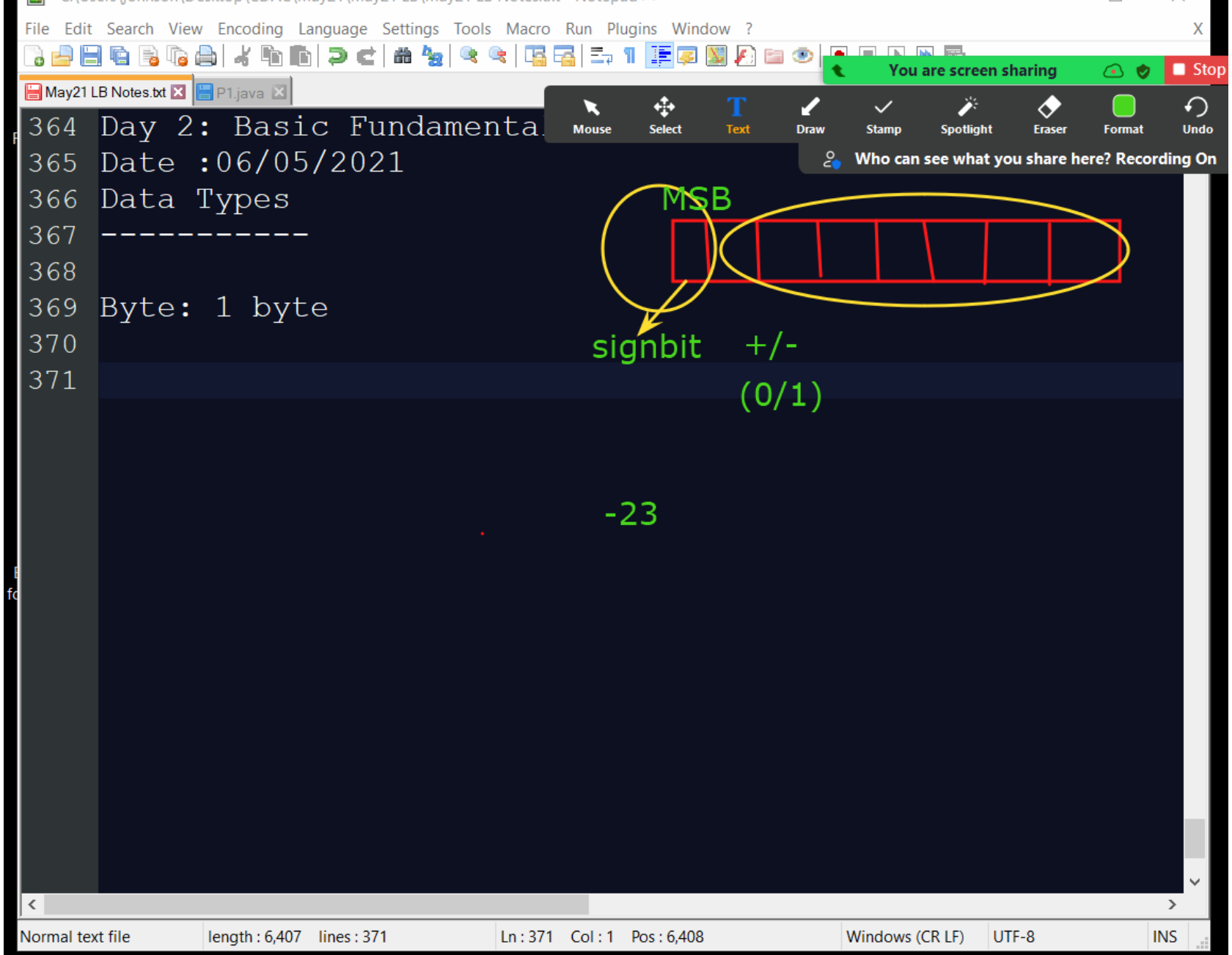
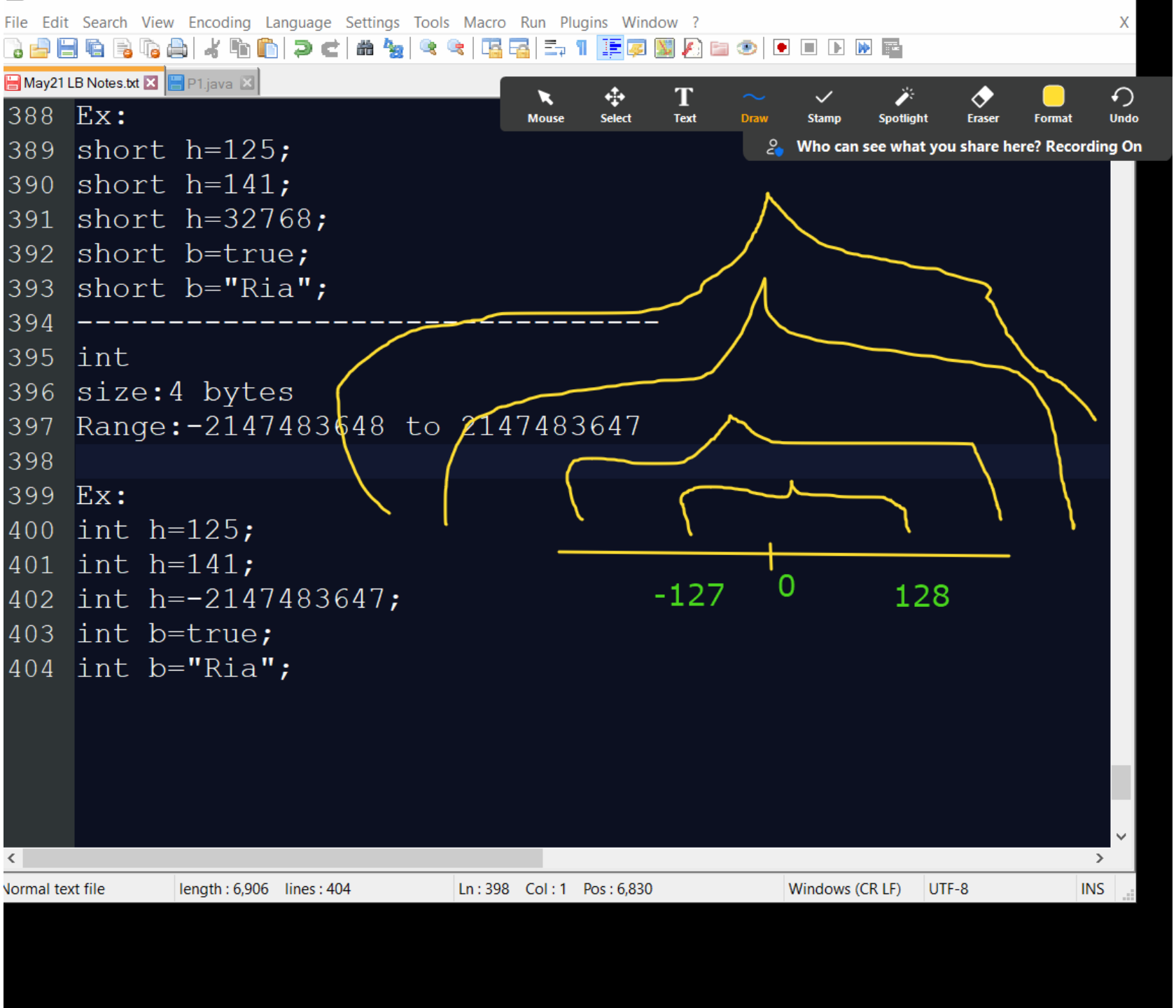
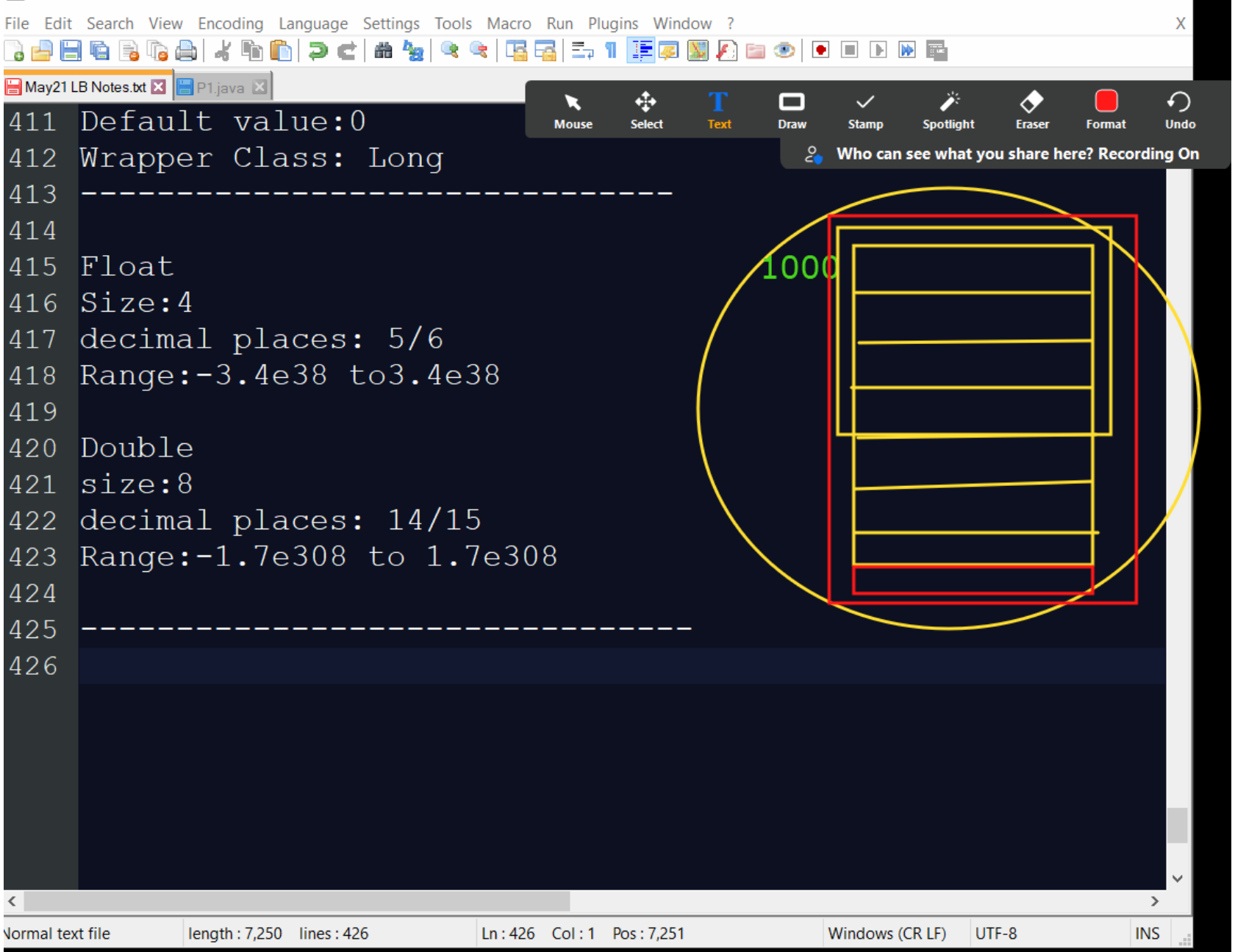
Basic Fundamental Programming
Day 2: May 2021

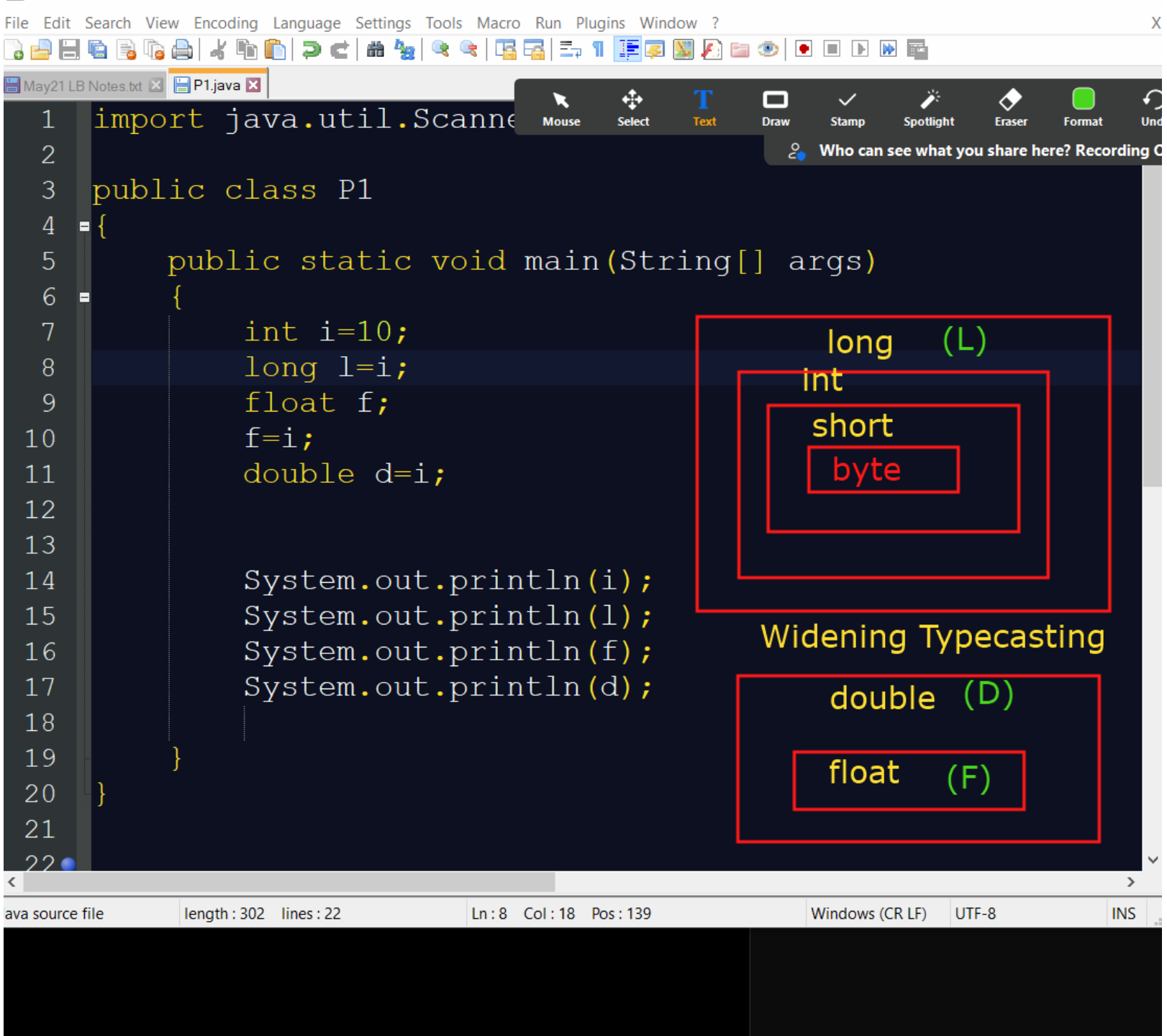
Kiran Waghmare


Microsoft Whiteboard
You are screen sharing
Stop
Mouse
Select
Text
Draw
Stamp
Spotlight
Eraser
Format
Undo
Who can see what you share here? Recording On
Data Type
Primitive
Non-Primitive
String
Array
etc.
Boolean
Numeric
Character
Integral
Integer
Floating-point
boolean
char
byte
short
int
long
float
double
1/2 byte
2 bytes
1 byte
2 byte
4 bytes
8 bytes
4 bytes
8 bytes
Strongly type Programminglanguage
OOPs-Multiple inheritance, operator overloading,
structures, unions, pointers


File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
You are screen sharing
Stop
May21 LB Notes.txt
P1.java
Mouse
Select
Text
Draw
Stamp
Spotlight
Eraser
Format
Undo
Who can see what you share here? Recording On
364 Day 2: Basic Fundamenta
365 Date :06/05/2021
366 Data Types
367 ----------
368
369 Byte: 1 byte
370
371
MSB
signbit
+/-
(0/1)
-23
Normal text file
length : 6,407
lines : 371
Ln : 371
Col : 1
Pos : 6,408
Windows (CR LF)
UTF-8
INS


File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
May21 LB Notes.txt
P1.java
Mouse
Select
Text
Draw
Stamp
Spotlight
Eraser
Format
Undo
Who can see what you share here? Recording On
388 Ex:
389 short h=125;
390 short h=141;
391 short h=32768;
392 short b=true;
393 short b="Ria";
394 ----------
395 int
396 size:4 bytes
397 Range:-2147483648 to 2147483647
398
399 Ex:
400 int h=125;
401 int h=141;
402 int h=-2147483647;
403 int b=true;
404 int b="Ria";
-127
0
128
Normal text file
length : 6,906 lines : 404
Ln : 398 Col : 1 Pos : 6,830
Windows (CR LF)
UTF-8
INS


File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
May21 LB Notes.txt
P1.java
Mouse
Select
Text
Draw
Stamp
Spotlight
Eraser
Format
Undo
Who can see what you share here? Recording On
411 Default value:0
412 Wrapper Class: Long
413 ------------------------------
414
415 Float
416 Size:4
417 decimal places: 5/6
418 Range:-3.4e38 to3.4e38
419
420 Double
421 size:8
422 decimal places: 14/15
423 Range:-1.7e308 to 1.7e308
424
425 ------------------------------
426
1000
Normal text file
length : 7,250
lines : 426
Ln : 426
Col : 1
Pos : 7,251
Windows (CR LF)
UTF-8
INS


File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
May21 LB Notes.txt
P1.java
Mouse
Select
Text
Draw
Stamp
Spotlight
Eraser
Format
Who can see what you share here? Recording
import java.util.Scanne
public class P1
{
public static void main(String[] args)
{
int i=10;
long l=i;
float f;
f=i;
double d=i;
System.out.println(i);
System.out.println(l);
System.out.println(f);
System.out.println(d);
}
}
long (L)
int
short
byte
Widening Typecasting
double (D)
float (F)
ava source file
length : 302 lines : 22
Ln : 8 Col : 18 Pos : 139
Windows (CR LF)
UTF-8
INS

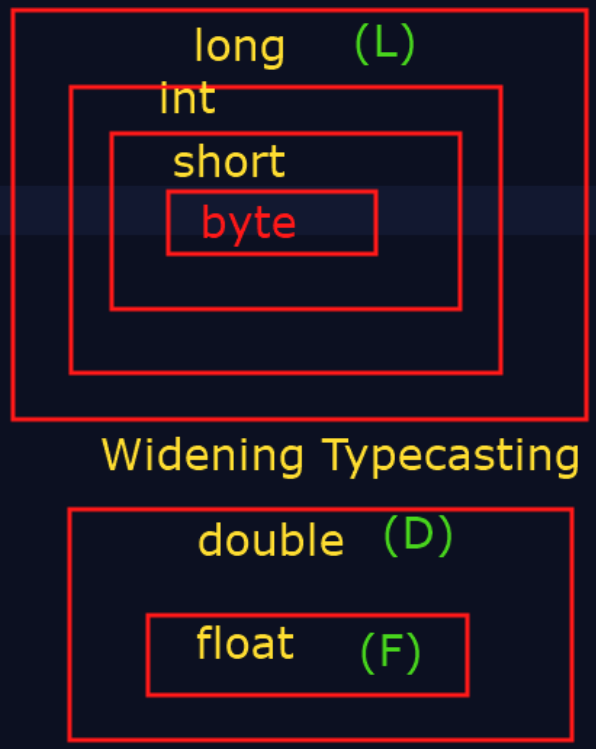
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?

May21 LB Notes.txt | P1.java

Mouse Select Text Draw Stamp Spotlight Eraser Format

Who can see what you share here? Recording

```
2
3  public class P1
4  {
5      public static void main(String[] args)
6      {
7          int i=10;
8          long l=i;
9          float f;
10         f=i;
11         double d=10.5673;
12         i=(int)d;
13
14
15         System.out.println(i);
16         System.out.println(l);
17         System.out.println(f);
18         System.out.println(d);
19         System.out.println(i);
20
21     }
22 }
23
```



Java source file | length : 347 | lines : 24 | Ln : 12 | Col : 16 | Pos : 191 | Windows (CR LF) | UTF-8 | INS

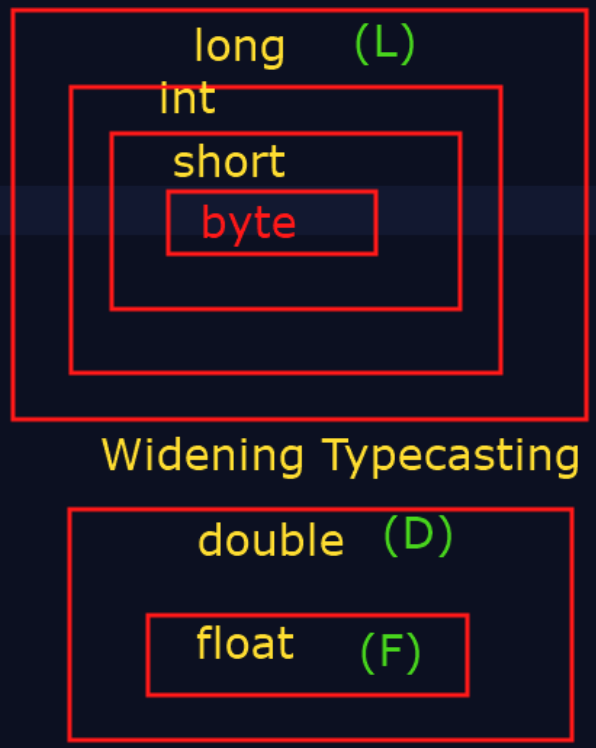
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?

May21 LB Notes.txt | P1.java

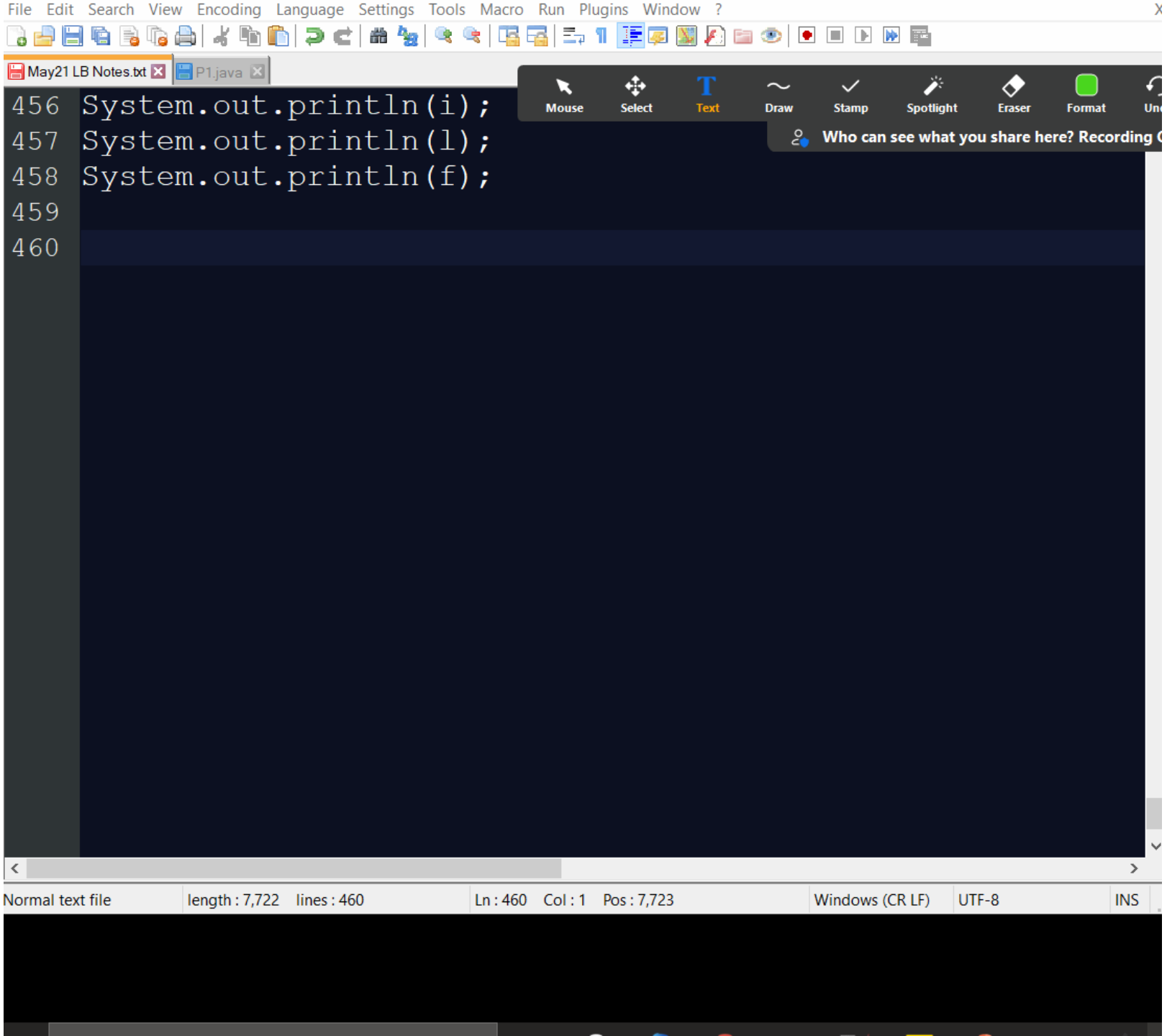
Mouse Select Text Draw Stamp Spotlight Eraser Format

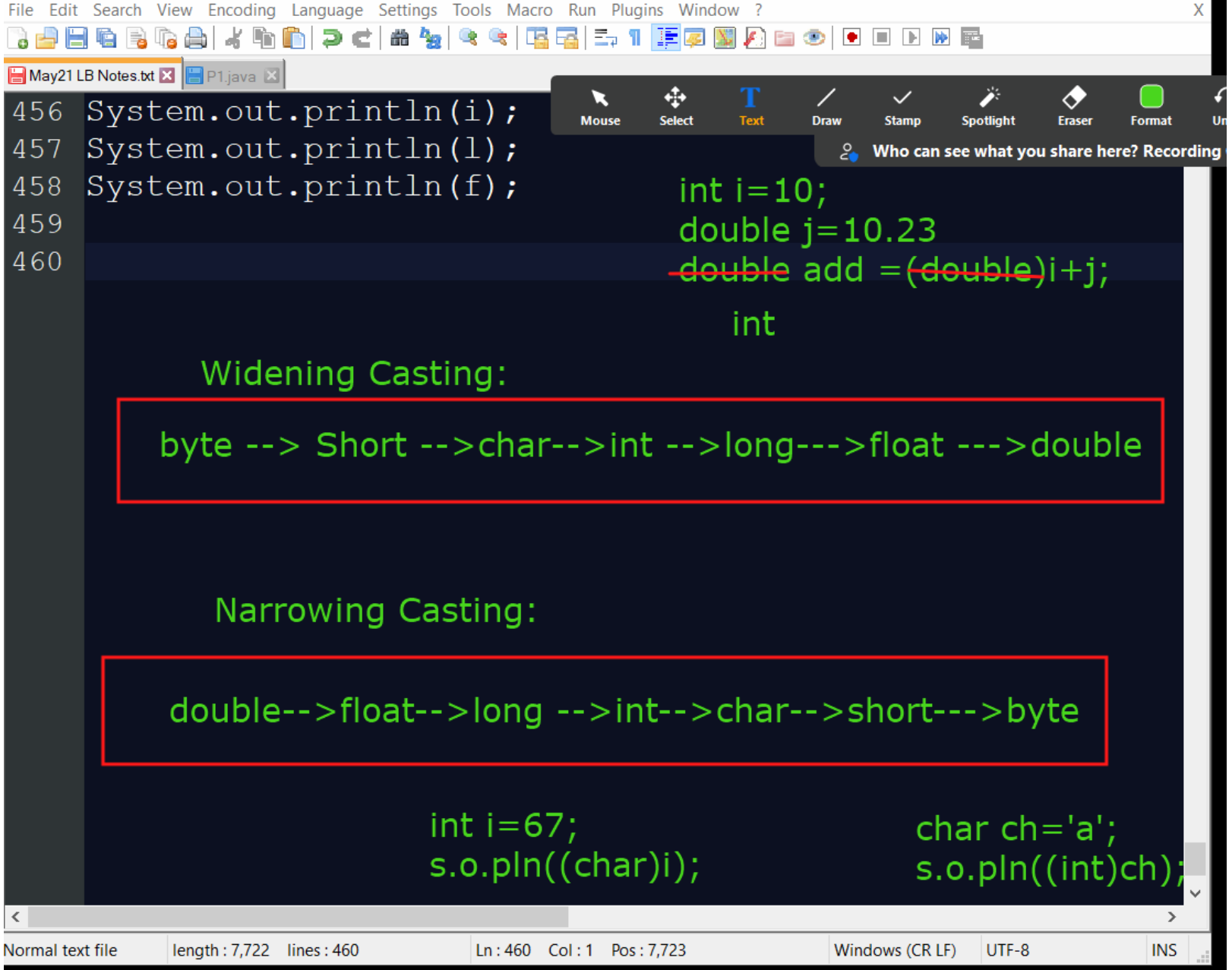
Who can see what you share here? Recording

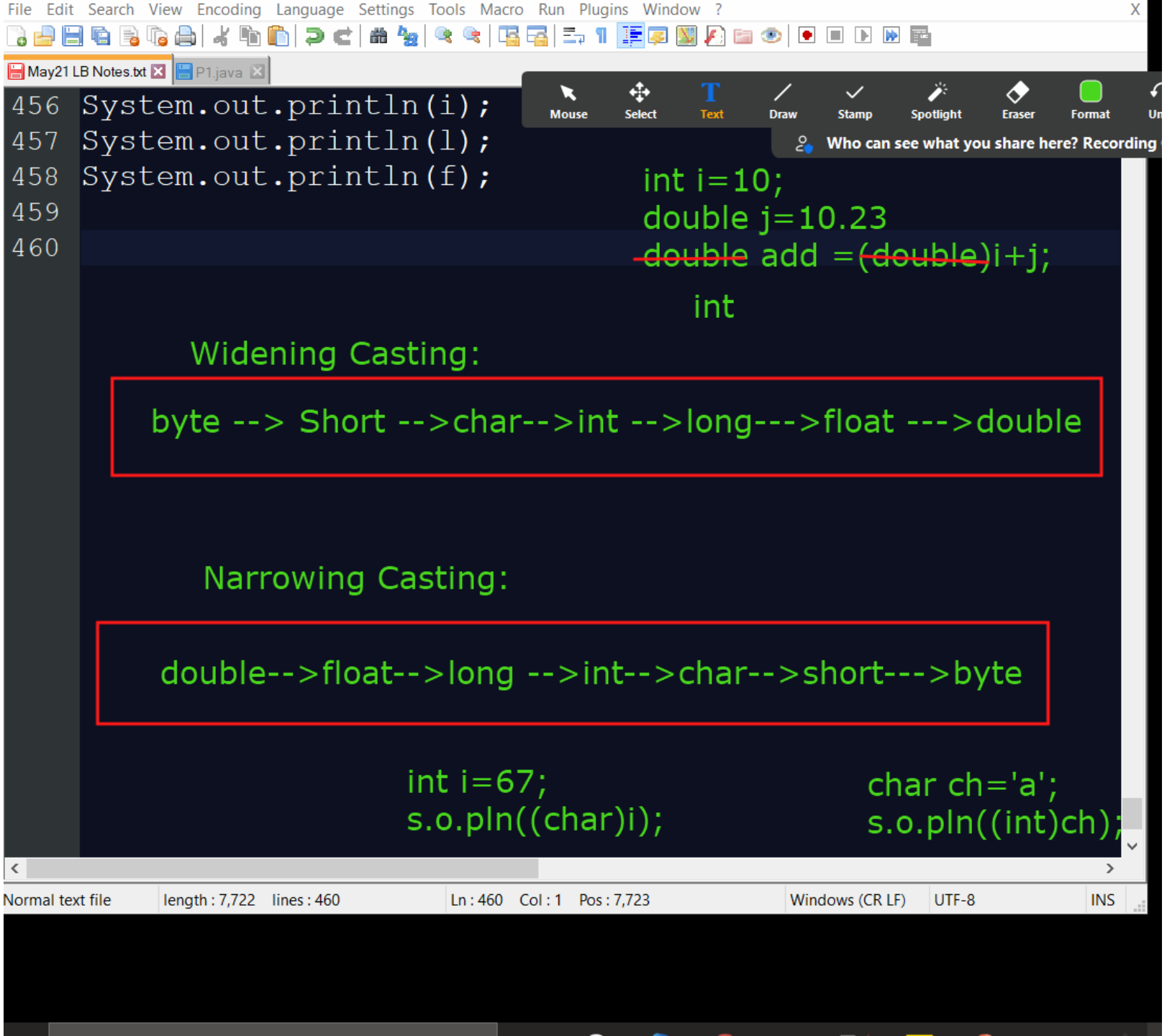
```
2
3  public class P1
4  {
5      public static void main(String[] args)
6      {
7          int i=10;
8          long l=i;
9          float f;
10         f=i;
11         double d=10.5673;
12         i=(int)d;
13
14
15         System.out.println(i);
16         System.out.println(l);
17         System.out.println(f);
18         System.out.println(d);
19         System.out.println(i);
20
21     }
22 }
23
```

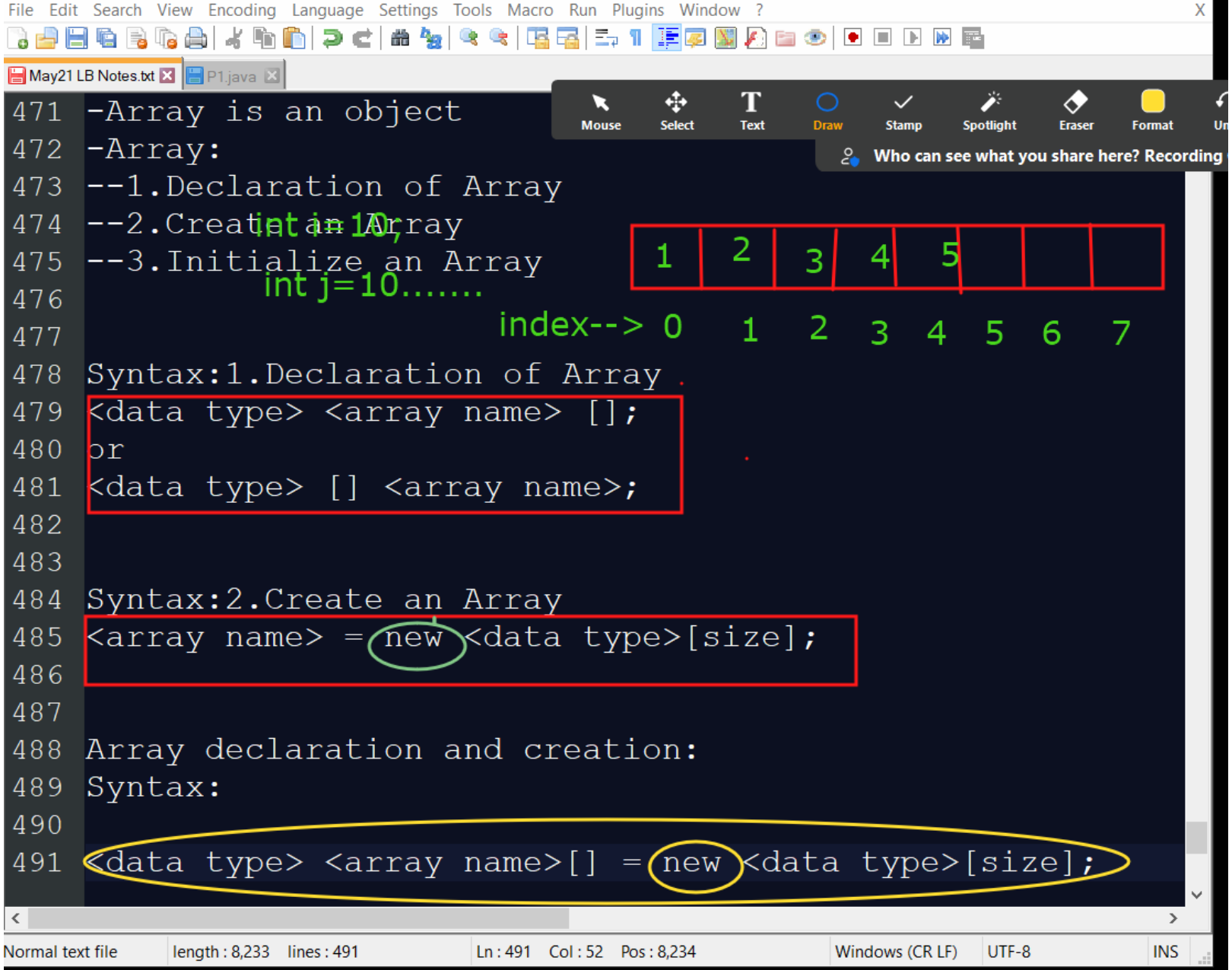


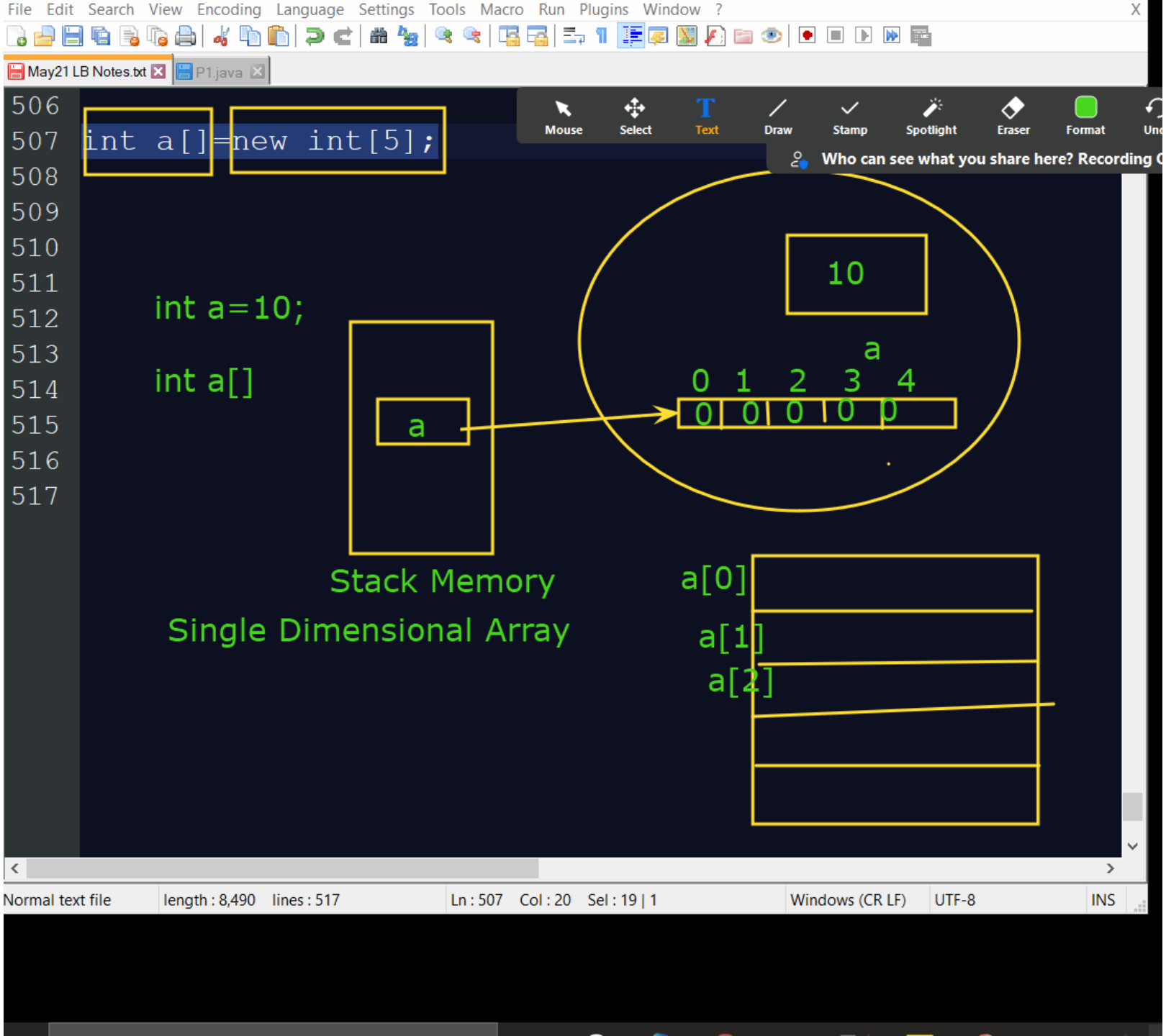
Java source file | length : 347 | lines : 24 | Ln : 12 | Col : 16 | Pos : 191 | Windows (CR LF) | UTF-8 | INS

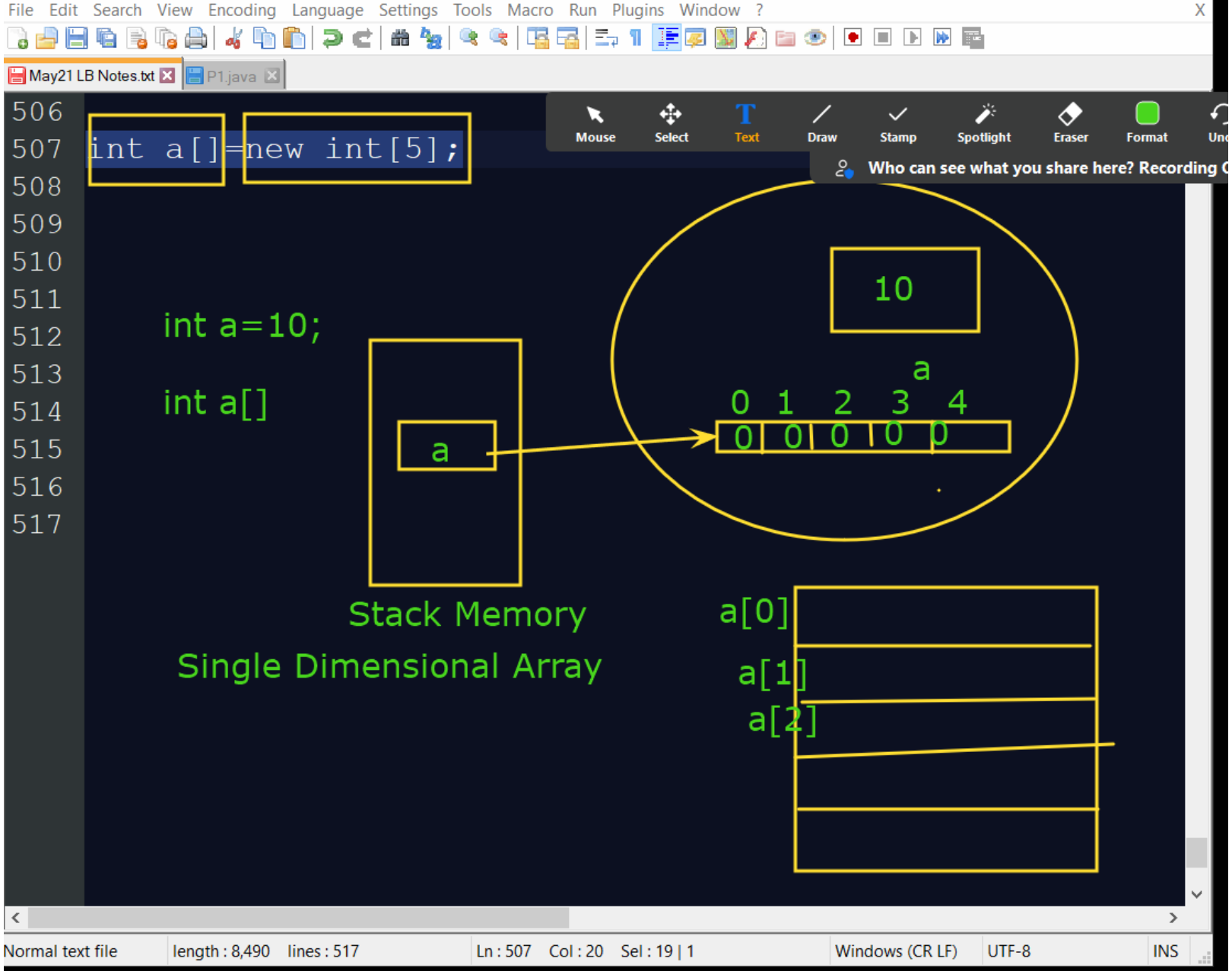

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
May21 LB Notes.txt
P1.java
Mouse
Select
Text
Draw
Stamp
Spotlight
Eraser
Format
Who can see what you share here? Recording
456 System.out.println(i);
457 System.out.println(l);
458 System.out.println(f);
459
460
Normal text file
length : 7,722
lines : 460
Ln : 460
Col : 1
Pos : 7,723
Windows (CR LF)
UTF-8
INS

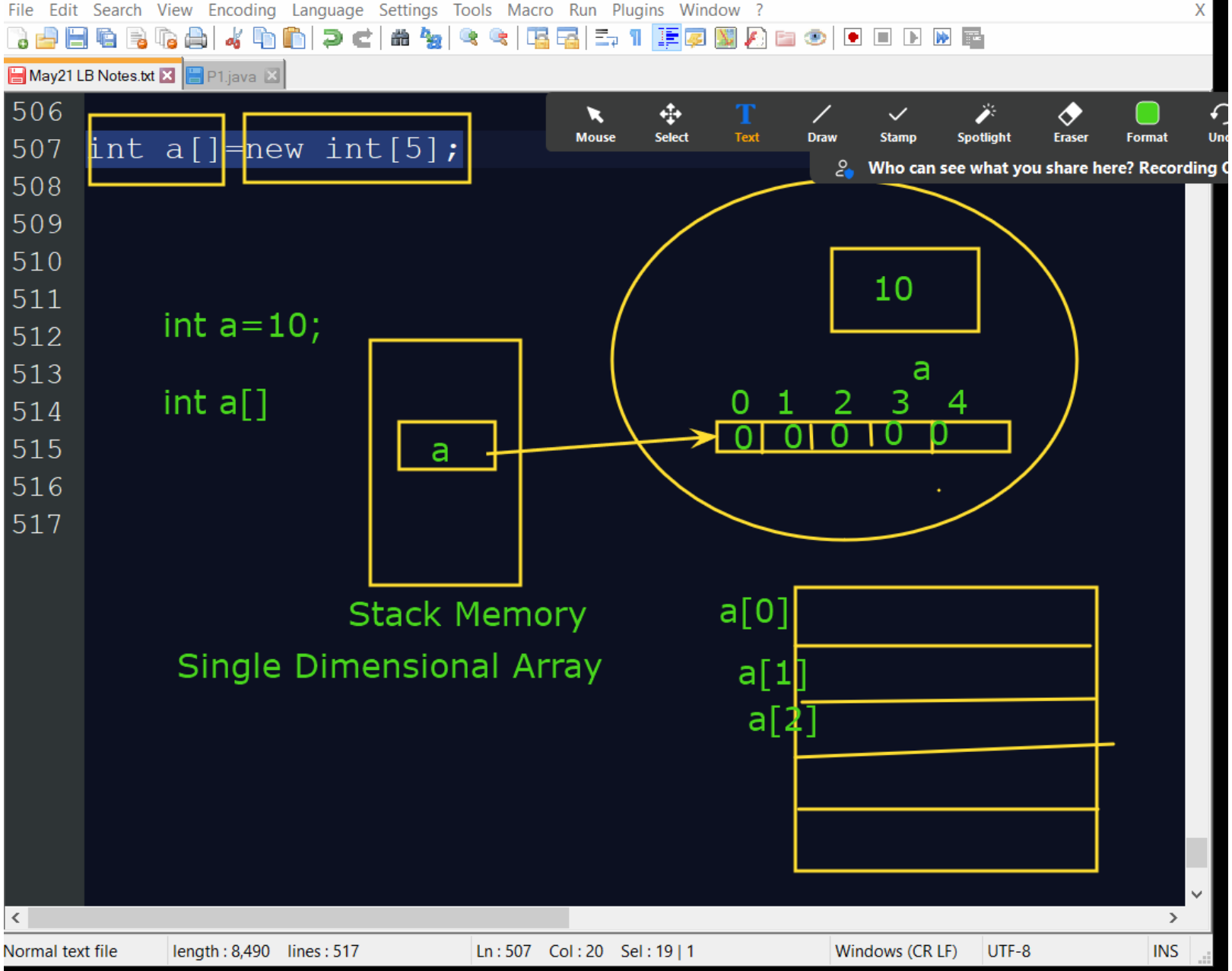

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
May21 LB Notes.txt
P1.java
Mouse
Select
Text
Draw
Stamp
Spotlight
Eraser
Format
Who can see what you share here? Recording
456 System.out.println(i);
457 System.out.println(l);
458 System.out.println(f);
459
460
int i=10;
double j=10.23
double add =(double)i+j;
int
Widening Casting:
byte --> Short -->char-->int -->long--->float --->double
Narrowing Casting:
double-->float-->long -->int-->char-->short--->byte
int i=67;
s.o.pln((char)i);
char ch='a';
s.o.pln((int)ch);
Normal text file
length : 7,722
lines : 460
Ln : 460
Col : 1
Pos : 7,723
Windows (CR LF)
UTF-8
INS


File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
May21 LB Notes.txt
P1.java
Mouse
Select
Text
Draw
Stamp
Spotlight
Eraser
Format
Who can see what you share here? Recording
456 System.out.println(i);
457 System.out.println(l);
458 System.out.println(f);
459
460
int i=10;
double j=10.23
double add =(double)i+j;
int
Widening Casting:
byte --> Short -->char-->int -->long--->float --->double
Narrowing Casting:
double-->float-->long -->int-->char-->short--->byte
int i=67;
s.o.pln((char)i);
char ch='a';
s.o.pln((int)ch);
Normal text file
length : 7,722
lines : 460
Ln : 460
Col : 1
Pos : 7,723
Windows (CR LF)
UTF-8
INS


File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
May21 LB Notes.txt
P1.java
Mouse
Select
Text
Draw
Stamp
Spotlight
Eraser
Format
Who can see what you share here? Recording
-Array is an object
-Array:
--1.Declaration of Array
--2.Creation of Array
--3.Initialize an Array
int i=10;
int j=10.....
1 2 3 4 5
index--> 0 1 2 3 4 5 6 7
Syntax:1.Declaration of Array
<data type> <array name> [];
or
<data type> [] <array name>;
Syntax:2.Create an Array
<array name> = new <data type>[size];
Array declaration and creation:
Syntax:
<data type> <array name>[] = new <data type>[size];
Normal text file
length : 8,233 lines : 491
Ln : 491 Col : 52 Pos : 8,234
Windows (CR LF)
UTF-8
INS


File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
May21 LB Notes.txt
P1.java
506
507
508
509
510
511
512
513
514
515
516
517
int a[]=new int[5];
Mouse
Select
Text
Draw
Stamp
Spotlight
Eraser
Format
Who can see what you share here? Recording
int a=10;
int a[]
a
10
a
0 1 2 3 4
0 0 0 0 0
Stack Memory
Single Dimensional Array
a[0]
a[1]
a[2]
Normal text file
length : 8,490
lines : 517
Ln : 507
Col : 20
Sel : 19 | 1
Windows (CR LF)
UTF-8
INS


File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
May21 LB Notes.txt
P1.java
506
507
508
509
510
511
512
513
514
515
516
517
int a[]=new int[5];
Mouse
Select
Text
Draw
Stamp
Spotlight
Eraser
Format
Who can see what you share here? Recording
int a=10;
int a[]
a
10
a
0 1 2 3 4
0 0 0 0 0
Stack Memory
Single Dimensional Array
a[0]
a[1]
a[2]
Normal text file
length : 8,490
lines : 517
Ln : 507
Col : 20
Sel : 19 | 1
Windows (CR LF)
UTF-8
INS


File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
May21 LB Notes.txt
P1.java
506
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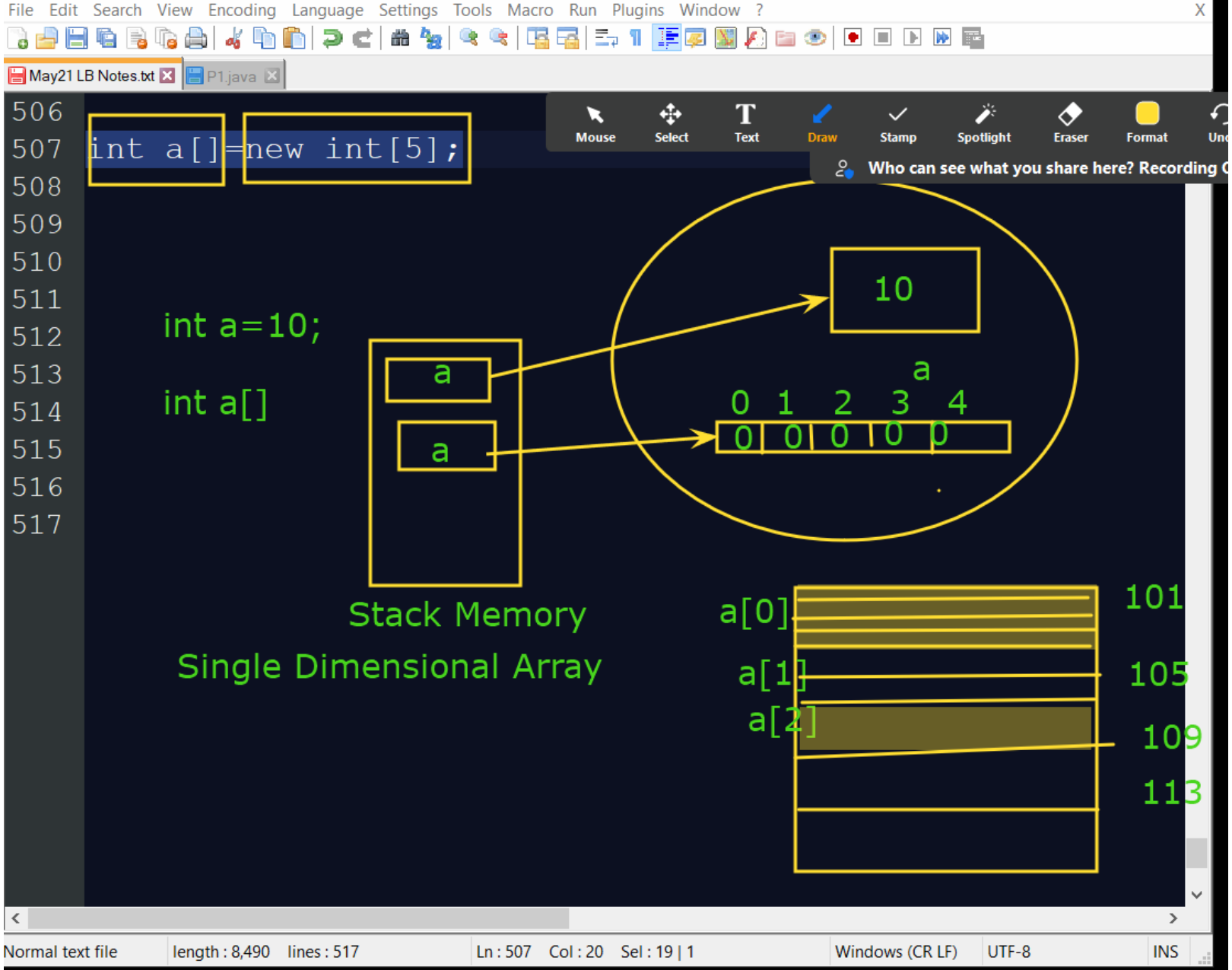
int a[]=new int[5];
Mouse
Select
Text
Draw
Stamp
Spotlight
Eraser
Format
Who can see what you share here? Recording
int a=10;
int a[]
a
10
a
0 1 2 3 4
0 0 0 0 0
Stack Memory
Single Dimensional Array
a[0]
a[1]
a[2]
Normal text file
length : 8,490
lines : 517
Ln : 507
Col : 20
Sel : 19 | 1
Windows (CR LF)
UTF-8
INS


File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
May21 LB Notes.txt
P1.java
506
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517
int a[]=new int[5];
Mouse
Select
Text
Draw
Stamp
Spotlight
Eraser
Format
Who can see what you share here? Recording
int a=10;
int a[]
a
a
10
a
0 1 2 3 4
0 0 0 0 0
Stack Memory
Single Dimensional Array
a[0]
a[1]
a[2]
101
105
109
113
Normal text file
length : 8,490
lines : 517
Ln : 507
Col : 20
Sel : 19 | 1
Windows (CR LF)
UTF-8
INS