```java
package main.java.Test2;


import com.sun.org.apache.xerces.internal.xs.ItemPSVI;
import main.calculator.Calculate;

import java.text.SimpleDateFormat;
import java.util.ArrayList;
import java.util.Date;
import java.util.GregorianCalendar;
import java.util.List;
import java.util.regex.Pattern;

public class Main {
    //不存在字段引用
    //只有两个utf8类型
    public static final int MAX=100;
    public static final String MIN;
    //存在字段引用
    private static final String a= UUID.randomUUID().toString();
    //字符串和long类型数字会存在在常量池中
    //double和float也会存在在常量池中
    //int 类型以下可以直接获取
    public static  String name="str";
    public String Name="strstr";
    //10000l
    public static long min=10000;
    public long minmin=100000;
    //10.5f
    float a=10.5f;
    //10.6d
    double b=10.6;
    public static int middle=1000;
    public int middlem=1000;
    short aver=5;
    short averTo=10;
    //代码中没用调用,不存在字段引用
    protected int temp;
    //代码中调用,存在字段引用
    private static String temps;
    private String userName;

    static {
        MIN="123";
    }
```

```java
    Main(){

    }

    Main(String userName){
        this();
        this.userName=userName;
    }

    public String getUserName() {
        return userName;
    }

    public void setUserName(String userName) {
        this.userName = userName;
    }

    public static void main(String[] args) {
        temps="dsa";
        Main main=new Main("dsa");
        List<Integer> list=new ArrayList<>();
        String a="aaa";
        Pattern p=Pattern.compile("\\d+");
        SimpleDateFormat date=new SimpleDateFormat("yyyy-mm-dd");

    }
}
```

```
D:\workspace\GUI\GUI\target\classes\main\java\Test2>javap -v Main.class
Classfile /D:/workspace/GUI/GUI/target/classes/main/java/Test2/Main.class
  Last modified 2020-1-10; size 1868 bytes
  MD5 checksum 50da49265431dc03204311973804ec62
  Compiled from "Main.java"
public class main.java.Test2.Main
  minor version: 0
  major version: 52
  flags: ACC_PUBLIC, ACC_SUPER
Constant pool:
   #1 = Methodref          #37.#87       // java/lang/Object."<init>":()V
   #2 = String             #88           // strstr
   #3 = Fieldref           #16.#89       // main/java/Test2/Main.Name:Ljava/lang/String;
   #4 = Long               100000l
   #6 = Fieldref           #16.#90       // main/java/Test2/Main.minmin:J
```

```
#7 = Fieldref          #16.#91      // main/java/Test2/Main.middlem:I
#8 = Fieldref          #16.#92      // main/java/Test2/Main.aver:S
#9 = Fieldref          #16.#93      // main/java/Test2/Main.averTo:S
#10 = Float            10.5f
#11 = Fieldref         #16.#94      // main/java/Test2/Main.a:F
#12 = Double           10.6d
#14 = Fieldref         #16.#95      // main/java/Test2/Main.b:D
#15 = Methodref        #16.#87      // main/java/Test2/Main."<init>":()V
#16 = Class            #96          // main/java/Test2/Main
#17 = Fieldref         #16.#97      //
main/java/Test2/Main.userName:Ljava/lang/String;
#18 = String           #98          // dsa
#19 = Fieldref         #16.#99      //
main/java/Test2/Main.temps:Ljava/lang/String;
#20 = Methodref        #16.#100     // main/java/Test2/Main."<init>":
(Ljava/lang/String;)V
#21 = Class            #101         // java/util/ArrayList
#22 = Methodref        #21.#87      // java/util/ArrayList."<init>":()V
#23 = String           #102         // aaa
#24 = String           #103         // \d+
#25 = Methodref        #104.#105    // java/util/regex/Pattern.compile:
(Ljava/lang/String;)Ljava/util/regex/Pattern;
#26 = Class            #106         // java/text/SimpleDateFormat
#27 = String           #107         // yyyy-mm-dd
#28 = Methodref        #26.#100     // java/text/SimpleDateFormat."<init>":
(Ljava/lang/String;)V
#29 = String           #108         // str
#30 = Fieldref         #16.#109     //
main/java/Test2/Main.name:Ljava/lang/String;
#31 = Long             10000l
#33 = Fieldref         #16.#110     // main/java/Test2/Main.min:J
#34 = Fieldref         #16.#111     // main/java/Test2/Main.middle:I
#35 = String           #112         // 123
#36 = Fieldref         #16.#113     // main/java/Test2/Main.MIN:Ljava/lang/String;
#37 = Class            #114         // java/lang/Object
#38 = Utf8             MAX
#39 = Utf8             I
#40 = Utf8             ConstantValue
#41 = Integer          100
#42 = Utf8             MIN
#43 = Utf8             Ljava/lang/String;
#44 = Utf8             name
#45 = Utf8             Name
#46 = Utf8             min
#47 = Utf8             J
#48 = Utf8             minmin
#49 = Utf8             middle
```

```
#50 = Utf8            middlem
#51 = Utf8            aver
#52 = Utf8            S
#53 = Utf8            averTo
#54 = Utf8            a
#55 = Utf8            F
#56 = Utf8            b
#57 = Utf8            D
#58 = Utf8            temp
#59 = Utf8            temps
#60 = Utf8            userName
#61 = Utf8            <init>
#62 = Utf8            ()V
#63 = Utf8            Code
#64 = Utf8            LineNumberTable
#65 = Utf8            LocalVariableTable
#66 = Utf8            this
#67 = Utf8            Lmain/java/Test2/Main;
#68 = Utf8            (Ljava/lang/String;)V
#69 = Utf8            getUserName
#70 = Utf8            ()Ljava/lang/String;
#71 = Utf8            setUserName
#72 = Utf8            main
#73 = Utf8            ([Ljava/lang/String;)V
#74 = Utf8            args
#75 = Utf8            [Ljava/lang/String;
#76 = Utf8            list
#77 = Utf8            Ljava/util/List;
#78 = Utf8            p
#79 = Utf8            Ljava/util/regex/Pattern;
#80 = Utf8            date
#81 = Utf8            Ljava/text/SimpleDateFormat;
#82 = Utf8            LocalVariableTypeTable
#83 = Utf8            Ljava/util/List<Ljava/lang/Integer;>;
#84 = Utf8            <clinit>
#85 = Utf8            SourceFile
#86 = Utf8            Main.java
#87 = NameAndType     #61:#62      // "<init>":()V
#88 = Utf8            strstr
#89 = NameAndType     #45:#43      // Name:Ljava/lang/String;
#90 = NameAndType     #48:#47      // minmin:J
#91 = NameAndType     #50:#39      // middlem:I
#92 = NameAndType     #51:#52      // aver:S
#93 = NameAndType     #53:#52      // averTo:S
#94 = NameAndType     #54:#55      // a:F
#95 = NameAndType     #56:#57      // b:D
#96 = Utf8            main/java/Test2/Main
```

```
  #97 = NameAndType       #60:#43      // userName:Ljava/lang/String;
  #98 = Utf8              dsa
  #99 = NameAndType       #59:#43      // temps:Ljava/lang/String;
 #100 = NameAndType       #61:#68      // "<init>":(Ljava/lang/String;)V
 #101 = Utf8              java/util/ArrayList
 #102 = Utf8              aaa
 #103 = Utf8              \d+
 #104 = Class             #115         // java/util/regex/Pattern
 #105 = NameAndType       #116:#117    // compile:
(Ljava/lang/String;)Ljava/util/regex/Pattern;
 #106 = Utf8              java/text/SimpleDateFormat
 #107 = Utf8              yyyy-mm-dd
 #108 = Utf8              str
 #109 = NameAndType       #44:#43      // name:Ljava/lang/String;
 #110 = NameAndType       #46:#47      // min:J
 #111 = NameAndType       #49:#39      // middle:I
 #112 = Utf8              123
 #113 = NameAndType       #42:#43      // MIN:Ljava/lang/String;
 #114 = Utf8              java/lang/Object
 #115 = Utf8              java/util/regex/Pattern
 #116 = Utf8              compile
 #117 = Utf8              (Ljava/lang/String;)Ljava/util/regex/Pattern;
{
  public static final int MAX;
    descriptor: I
    flags: ACC_PUBLIC, ACC_STATIC, ACC_FINAL
    ConstantValue: int 100

  public static final java.lang.String MIN;
    descriptor: Ljava/lang/String;
    flags: ACC_PUBLIC, ACC_STATIC, ACC_FINAL

  public static java.lang.String name;
    descriptor: Ljava/lang/String;
    flags: ACC_PUBLIC, ACC_STATIC

  public java.lang.String Name;
    descriptor: Ljava/lang/String;
    flags: ACC_PUBLIC

  public static long min;
    descriptor: J
    flags: ACC_PUBLIC, ACC_STATIC

  public long minmin;
    descriptor: J
    flags: ACC_PUBLIC
```

public static int middle;
  descriptor: I
  flags: ACC_PUBLIC, ACC_STATIC

public int middlem;
  descriptor: I
  flags: ACC_PUBLIC

short aver;
  descriptor: S
  flags:

short averTo;
  descriptor: S
  flags:

float a;
  descriptor: F
  flags:

double b;
  descriptor: D
  flags:

protected int temp;
  descriptor: I
  flags: ACC_PROTECTED

main.java.Test2.Main();
  descriptor: ()V
  flags:
  Code:
    stack=3, locals=1, args_size=1
      0: aload_0
      1: invokespecial #1   // Method java/lang/Object."<init>":()V
      4: aload_0
      5: ldc   #2   // String strstr
      7: putfield   #3   // Field Name:Ljava/lang/String;
      10: aload_0
      11: ldc2_w   #4   // long 100000l
      14: putfield   #6   // Field minmin:J
      17: aload_0
      18: sipush   1000
      21: putfield   #7   // Field middlem:I
      24: aload_0
      25: iconst_5

```
    26: putfield      #8              // Field aver:S
    29: aload_0
    30: bipush        10
    32: putfield      #9              // Field averTo:S
    35: aload_0
    36: ldc           #10             // float 10.5f
    38: putfield      #11             // Field a:F
    41: aload_0
    42: ldc2_w        #12             // double 10.6d
    45: putfield      #14             // Field b:D
    48: return
  LineNumberTable:
    line 35: 0
    line 18: 4
    line 20: 10
    line 22: 17
    line 23: 24
    line 24: 29
    line 25: 35
    line 26: 41
    line 37: 48
  LocalVariableTable:
    Start  Length  Slot  Name   Signature
      0      49     0    this   Lmain/java/Test2/Main;

main.java.Test2.Main(java.lang.String);
 descriptor: (Ljava/lang/String;)V
 flags:
 Code:
   stack=2, locals=2, args_size=2
     0: aload_0
     1: invokespecial #15             // Method "<init>":()V
     4: aload_0
     5: bipush        100
     7: putfield      #9              // Field averTo:S
    10: aload_0
    11: aload_1
    12: putfield      #17             // Field userName:Ljava/lang/String;
    15: return
  LineNumberTable:
    line 40: 0
    line 41: 4
    line 42: 10
    line 43: 15
  LocalVariableTable:
    Start  Length  Slot  Name   Signature
      0      16     0    this   Lmain/java/Test2/Main;
```

```
     0     16    1 userName   Ljava/lang/String;

public java.lang.String getUserName();
  descriptor: ()Ljava/lang/String;
  flags: ACC_PUBLIC
  Code:
    stack=1, locals=1, args_size=1
      0: aload_0
      1: getfield      #17              // Field userName:Ljava/lang/String;
      4: areturn
    LineNumberTable:
      line 46: 0
    LocalVariableTable:
      Start  Length  Slot  Name   Signature
        0      5     0  this   Lmain/java/Test2/Main;

public void setUserName(java.lang.String);
  descriptor: (Ljava/lang/String;)V
  flags: ACC_PUBLIC
  Code:
    stack=2, locals=2, args_size=2
      0: aload_0
      1: aload_1
      2: putfield      #17              // Field userName:Ljava/lang/String;
      5: return
    LineNumberTable:
      line 50: 0
      line 51: 5
    LocalVariableTable:
      Start  Length  Slot  Name   Signature
        0      6     0  this   Lmain/java/Test2/Main;
        0      6     1 userName   Ljava/lang/String;

public static void main(java.lang.String[]);
  descriptor: ([Ljava/lang/String;)V
  flags: ACC_PUBLIC, ACC_STATIC
  Code:
    stack=3, locals=6, args_size=1
      0: ldc           #18              // String dsa
      2: putstatic     #19              // Field temps:Ljava/lang/String;
      5: new           #16              // class main/java/Test2/Main
      8: dup
      9: ldc           #18              // String dsa
     11: invokespecial #20              // Method "<init>":(Ljava/lang/String;)V
     14: astore_1
     15: new           #21              // class java/util/ArrayList
     18: dup
```

```
      19: invokespecial #22              // Method java/util/ArrayList."<init>":()V
      22: astore_2
      23: ldc         #23               // String aaa
      25: astore_3
      26: ldc         #24               // String \d+
      28: invokestatic #25              // Method java/util/regex/Pattern.compile:
(Ljava/lang/String;)Ljava/util/regex/Pattern;
      31: astore        4
      33: new         #26               // class java/text/SimpleDateFormat
      36: dup
      37: ldc         #27               // String yyyy-mm-dd
      39: invokespecial #28              // Method java/text/SimpleDateFormat."
<init>":(Ljava/lang/String;)V
      42: astore        5
      44: return
    LineNumberTable:
      line 54: 0
      line 55: 5
      line 56: 15
      line 57: 23
      line 58: 26
      line 59: 33
      line 62: 44
    LocalVariableTable:
      Start  Length  Slot  Name   Signature
        0      45     0   args   [Ljava/lang/String;
       15      30     1   main   Lmain/java/Test2/Main;
       23      22     2   list   Ljava/util/List;
       26      19     3     a    Ljava/lang/String;
       33      12     4     p    Ljava/util/regex/Pattern;
       44      1      5   date   Ljava/text/SimpleDateFormat;
    LocalVariableTypeTable:
      Start  Length  Slot  Name   Signature
       23      22     2   list   Ljava/util/List<Ljava/lang/Integer;>;

  static {};
    descriptor: ()V
    flags: ACC_STATIC
    Code:
      stack=2, locals=0, args_size=0
        0: ldc         #29               // String str
        2: putstatic    #30               // Field name:Ljava/lang/String;
        5: ldc2_w       #31               // long 10000l
        8: putstatic    #33               // Field min:J
       11: sipush        1000
       14: putstatic    #34               // Field middle:I
       17: ldc         #35               // String 123
```

```
      19: putstatic     #36              // Field MIN:Ljava/lang/String;
      22: return
    LineNumberTable:
      line 17: 0
      line 19: 5
      line 21: 11
      line 32: 17
      line 33: 22
}
SourceFile: "Main.java"
```

CAFEBABE20202034203C0A200F202C0A
2004202C092004202D07202E08202F0A
200420300720310A2007202C08203208
20330A2034203507203608 20370A200C
2030072038012008757365724E616D65
0120124C6A6176612F6C616E672F5374
72696E673B0120063C696E69743E0120
03282956012004436F646501200F4C69
6E654E756D6265725461626C65012012
4C6F63616C5661726961626C65546162
6C6501200474686973012016 4C6D6169
6E2F6A6176612F54657374322F4D6169
6E3B012015284C6A6176612F6C616E67
2F537472696E673B295601200B676574
557365724E616D6501201428294C6A61
76612F6C616E672F537472696E673B01
200B736574557365724E616D65012004
6D61696E012016285B4C6A6176612F6C
616E672F537472696E673B2956012004
617267730120135B4C6A6176612F6C61
6E672F537472696E673B0120046C6973
740120104C6A6176612F7574696C2F4C
6973743B012001610120017001 20194C
6A6176612F7574696C2F72656765782F
50617474 65726E3B0120046461746501
201C4C6A6176612F746578742F53696D
706C6544617465466F726D61743B0120
164C6F63616C5661726961626C655479
70655461626C650120254C6A6176612F
7574696C2F4C6973743C4C6A6176612F
6C616E672F496E74656765723B3E3B01
200A536F7572636546696C650120094D
61696E2E6A61766100C2012201300C2010
```

20110120146D61696E2F6A6176612F54
657374322F4D61696E01200364731C0C
201220190120136A6176612F7574696C
2F41727261794C697374401200361616
0120035C642B0720390C203A203B0120
1A6A6176612F746578742F53696D706C
6544617465466F726D617401200A7979
79792D6D2D64640120106A6176612F
6C616E672F4F626A6563740120176A61
76612F7574696C2F72656765782F5061
747465726E012007636F6D70696C6501
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72696E673B294C6A6176612F7574696C
2F72656765782F5061747465726E3B20
212004200F2020200120022010201120
2000520202012013200120142020 20
332001200120202005 2AB72001B12020
2002201520202000A20022020200E2004
201020162020200C2001202020052017
2018202020202012201920012014 2020
2046200220022020200A2AB720022A2B
B52003B1202020002201520202000E2003
202020132004201420092015 2016 2020
2016 2002 2020 200A 2017 2018 2020 2020
200A2010201120012001201A201B2001
20142020202F20012001202020052AB4
2003B02020200220152020 2006 200120
20201C20162020200C2001 2020 200520
172018202020012001C20192001201420
20203E200220022020200620A2BB52003
B120202000220152020200A200220202020
20005202120162020201620022020 20
2006 2017 2018 2020 2020 2020 06 2010 201120
0120092010201E20012014202020AA20
03200620202028BB2004591205B72006
4CBB200759B720084D12094E120AB820
0B3A04BB200C59120DB7200E3A05B120
20200320152020201A200620202024 20
0A2025201220262015 2027201C 2028 20
27202B20162020203E200620202028 20
1F20202020200A201E201D2018200120
1220162021202200220152013202320
112003201C200C20242025 2004 2027 20
0120262027200520282020 200C200120
1220162021 2029 2002 2001 202A20 2020
02202B