```
L0
LINENUMBER 90 L0
NEW java/util/LinkedHashMap
DUP
INVOKESPECIAL java/util/LinkedHashMap.<init> ()V
ASTORE 5
L1
LINENUMBER 91 L1
ALOAD 1
INVOKEVIRTUAL com/googlecode/pngtastic/core/PngImage.getColorType ()S
INVOKESTATIC com/googlecode/pngtastic/core/PngImageType.forColorType (I)Lcom/googlecode/pngtastic/core/PngImageType;
ASTORE 6
L2
LINENUMBER 92 L2
ALOAD 1
INVOKEVIRTUAL com/googlecode/pngtastic/core/PngImage.getSampleBitCount ()I
ISTORE 7
L3
LINENUMBER 94 L3
ICONST_0
ISTORE 8
L4
LINENUMBER 95 L4
ALOAD 2
INVOKEINTERFACE java/util/List.iterator ()Ljava/util/Iterator;
ASTORE 9
```

```
L5
FRAME FULL [com/googlecode/pngtastic/core/PngColorCounter com/googlecode/pngtastic/core/PngImage java/util/List J java/util/LinkedHashMap com/googlecode/pngtastic/core/PngImageType I I java/util/Iterator] []
LDC "7ce854ab-1463-47b3-bdfe-b5d2c2e718eb"
INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/region/Regions.enter (Ljava/lang/String;)V
ALOAD 9
INVOKEINTERFACE java/util/Iterator.hasNext ()Z
IFEQ L6
```

```
ALOAD 9
INVOKEINTERFACE java/util/Iterator.next ()Ljava/lang/Object;
CHECKCAST [B
ASTORE 10
L7
LINENUMBER 96 L7
ALOAD 0
GETFIELD com/googlecode/pngtastic/core/PngColorCounter.timeout : J
LCONST_0
LCMP
IFLE L8
```

```
INVOKESTATIC java/lang/System.currentTimeMillis ()J
LLOAD 3
LSUB
ALOAD 0
GETFIELD com/googlecode/pngtastic/core/PngColorCounter.timeout : J
LCMP
IFLE L8
```

```
L9
LINENUMBER 97 L9
NEW com/googlecode/pngtastic/core/PngException
DUP
NEW java/lang/StringBuilder
DUP
INVOKESPECIAL java/lang/StringBuilder.<init> ()V
LDC "Reached "
INVOKEVIRTUAL java/lang/StringBuilder.append (Ljava/lang/String;)Ljava/lang/StringBuilder;
ALOAD 0
GETFIELD com/googlecode/pngtastic/core/PngColorCounter.timeout : J
INVOKEVIRTUAL java/lang/StringBuilder.append (J)Ljava/lang/StringBuilder;
LDC "ms timeout"
INVOKEVIRTUAL java/lang/StringBuilder.append (Ljava/lang/String;)Ljava/lang/StringBuilder;
INVOKEVIRTUAL java/lang/StringBuilder.toString ()Ljava/lang/String;
INVOKESPECIAL com/googlecode/pngtastic/core/PngException.<init> (Ljava/lang/String;)V
ATHROW
```

```
L8
LINENUMBER 99 L8
FRAME APPEND [[B]
ALOAD 10
ARRAYLENGTH
ICONST_1
ISUB
BIPUSH 8
IMUL
ILOAD 7
IDIV
ISTORE 11
L10
LINENUMBER 100 L10
NEW java/io/ByteArrayInputStream
DUP
ALOAD 10
INVOKESPECIAL java/io/ByteArrayInputStream.<init> ([B)V
ASTORE 12
L11
LINENUMBER 101 L11
NEW java/io/DataInputStream
DUP
ALOAD 12
INVOKESPECIAL java/io/DataInputStream.<init> (Ljava/io/InputStream;)V
ASTORE 13
L12
LINENUMBER 102 L12
ALOAD 13
INVOKEVIRTUAL java/io/DataInputStream.readUnsignedByte ()I
POP
L13
LINENUMBER 104 L13
ICONST_0
ISTORE 14
```

```
ICONST_1
GOTO L61
```

```
L61
FRAME FULL [com/googlecode/pngtastic/core/PngColorCounter com/googlecode/pngtastic/core/PngImage java/util/List J java/util/LinkedHashMap com/googlecode/pngtastic/core/PngImageType I I java/util/Iterator [B I java/io/ByteArrayInputStream java/io/DataInputStream I com/googlecode/pngtastic/core/PngPixel java/lang/Integer I I] [java/util/LinkedHashMap com/googlecode/pngtastic/core/PngPixel I]
INVOKESTATIC java/lang/Integer.valueOf (I)Ljava/lang/Integer;
INVOKEINTERFACE java/util/Map.put (Ljava/lang/Object;Ljava/lang/Object;)Ljava/lang/Object;
POP
L62
LINENUMBER 162 L62
GOTO L31
```

```
L31
LINENUMBER 104 L31
FRAME FULL [com/googlecode/pngtastic/core/PngColorCounter com/googlecode/pngtastic/core/PngImage java/util/List J java/util/LinkedHashMap com/googlecode/pngtastic/core/PngImageType I I java/util/Iterator [B I java/io/ByteArrayInputStream java/io/DataInputStream I T T I I] []
IINC 14 1
GOTO L14
```

```
L14
FRAME FULL [com/googlecode/pngtastic/core/PngColorCounter com/googlecode/pngtastic/core/PngImage java/util/List J java/util/LinkedHashMap com/googlecode/pngtastic/core/PngImageType I I java/util/Iterator [B I java/io/ByteArrayInputStream java/io/DataInputStream I] []
ILOAD 14
ILOAD 11
IF_ICMPGE L15
```

```
L15
LINENUMBER 170 L15
FRAME FULL [com/googlecode/pngtastic/core/PngColorCounter com/googlecode/pngtastic/core/PngImage java/util/List J java/util/LinkedHashMap com/googlecode/pngtastic/core/PngImageType I I java/util/Iterator [B I java/io/ByteArrayInputStream java/io/DataInputStream I] []
IINC 8 1
L63
LINENUMBER 171 L63
GOTO L5
```

```
L16
LINENUMBER 105 L16
GETSTATIC com/googlecode/pngtastic/core/PngColorCounter$1.$SwitchMap$com$googlecode$pngtastic$core$PngImageType : [I
ALOAD 6
INVOKEVIRTUAL com/googlecode/pngtastic/core/PngImageType.ordinal ()I
IALOAD
TABLESWITCH 1: L17 2: L18 3: L18 4: L19 5: L20 default: L21
```

```
L20
LINENUMBER 145 L20
FRAME FULL [com/googlecode/pngtastic/core/PngColorCounter com/googlecode/pngtastic/core/PngImage java/util/List J java/util/LinkedHashMap com/googlecode/pngtastic/core/PngImageType I I java/util/Iterator [B I java/io/ByteArrayInputStream java/io/DataInputStream I] []
ALOAD 1
INVOKEVIRTUAL com/googlecode/pngtastic/core/PngImage.getBitDepth ()S
BIPUSH 8
IF_ICMPNE L46
```

```
L18
LINENUMBER 122 L18
FRAME FULL [com/googlecode/pngtastic/core/PngColorCounter com/googlecode/pngtastic/core/PngImage java/util/List J java/util/LinkedHashMap com/googlecode/pngtastic/core/PngImageType I I java/util/Iterator [B I java/io/ByteArrayInputStream java/io/DataInputStream I] []
NEW com/googlecode/pngtastic/core/PngException
DUP
LDC "Greyscale images not supported"
INVOKESPECIAL com/googlecode/pngtastic/core/PngException.<init> (Ljava/lang/String;)V
ATHROW
```

```
L17
LINENUMBER 108 L17
FRAME SAME
ALOAD 13
INVOKEVIRTUAL java/io/DataInputStream.readUnsignedByte ()I
ICONST_3
IMUL
ISTORE 15
L22
LINENUMBER 109 L22
ALOAD 1
INVOKEVIRTUAL com/googlecode/pngtastic/core/PngImage.getPalette ()Lcom/googlecode/pngtastic/core/PngChunk;
ILOAD 15
INVOKEVIRTUAL com/googlecode/pngtastic/core/PngChunk.getUnsignedByte (I)S
ISTORE 16
L23
LINENUMBER 110 L23
ALOAD 1
INVOKEVIRTUAL com/googlecode/pngtastic/core/PngImage.getPalette ()Lcom/googlecode/pngtastic/core/PngChunk;
ILOAD 15
ICONST_1
IADD
INVOKEVIRTUAL com/googlecode/pngtastic/core/PngChunk.getUnsignedByte (I)S
ISTORE 17
L24
LINENUMBER 111 L24
ALOAD 1
INVOKEVIRTUAL com/googlecode/pngtastic/core/PngImage.getPalette ()Lcom/googlecode/pngtastic/core/PngChunk;
ILOAD 15
ICONST_2
IADD
INVOKEVIRTUAL com/googlecode/pngtastic/core/PngChunk.getUnsignedByte (I)S
ISTORE 18
L25
LINENUMBER 113 L25
NEW com/googlecode/pngtastic/core/PngPixel
DUP
ILOAD 14
ILOAD 8
ILOAD 16
ILOAD 17
ILOAD 18
ICONST_1
INVOKESPECIAL com/googlecode/pngtastic/core/PngPixel.<init> (IIIIIZ)V
ASTORE 19
L26
LINENUMBER 114 L26
ALOAD 5
ALOAD 19
INVOKEINTERFACE java/util/Map.get (Ljava/lang/Object;)Ljava/lang/Object;
CHECKCAST java/lang/Integer
ASTORE 20
L27
LINENUMBER 115 L27
ALOAD 5
ALOAD 19
ALOAD 20
IFNONNULL L28
```

```
L19
LINENUMBER 126 L19
FRAME SAME
ALOAD 1
INVOKEVIRTUAL com/googlecode/pngtastic/core/PngImage.getBitDepth ()S
BIPUSH 8
IF_ICMPNE L32
```

```
L47
LINENUMBER 146 L47
ALOAD 13
INVOKEVIRTUAL java/io/DataInputStream.readUnsignedByte ()I
ISTORE 16
L48
LINENUMBER 147 L48
ALOAD 13
INVOKEVIRTUAL java/io/DataInputStream.readUnsignedByte ()I
ISTORE 17
L49
LINENUMBER 148 L49
ALOAD 13
INVOKEVIRTUAL java/io/DataInputStream.readUnsignedByte ()I
ISTORE 18
L50
LINENUMBER 149 L50
ALOAD 13
INVOKEVIRTUAL java/io/DataInputStream.readUnsignedByte ()I
ISTORE 19
L51
LINENUMBER 150 L51
NEW com/googlecode/pngtastic/core/PngPixel
DUP
ILOAD 14
ILOAD 8
ILOAD 16
ILOAD 17
ILOAD 18
ILOAD 19
INVOKESPECIAL com/googlecode/pngtastic/core/PngPixel.<init> (IIIIII)V
ASTORE 15
L52
LINENUMBER 151 L52
GOTO L53
```

```
L46
LINENUMBER 153 L46
FRAME SAME
ALOAD 13
INVOKEVIRTUAL java/io/DataInputStream.readUnsignedShort ()I
ISTORE 16
L54
LINENUMBER 154 L54
ALOAD 13
INVOKEVIRTUAL java/io/DataInputStream.readUnsignedShort ()I
ISTORE 17
L55
LINENUMBER 155 L55
ALOAD 13
INVOKEVIRTUAL java/io/DataInputStream.readUnsignedShort ()I
ISTORE 18
L56
LINENUMBER 156 L56
ALOAD 13
INVOKEVIRTUAL java/io/DataInputStream.readUnsignedShort ()I
ISTORE 19
L57
LINENUMBER 157 L57
NEW com/googlecode/pngtastic/core/PngPixel
DUP
ILOAD 14
ILOAD 8
ILOAD 16
ILOAD 17
ILOAD 18
ILOAD 19
INVOKESPECIAL com/googlecode/pngtastic/core/PngPixel.<init> (IIIIII)V
ASTORE 15
```

```
L53
LINENUMBER 159 L53
FRAME FULL [com/googlecode/pngtastic/core/PngColorCounter com/googlecode/pngtastic/core/PngImage java/util/List J java/util/LinkedHashMap com/googlecode/pngtastic/core/PngImageType I I java/util/Iterator [B I java/io/ByteArrayInputStream java/io/DataInputStream I com/googlecode/pngtastic/core/PngPixel I I I] []
ALOAD 15
INVOKEVIRTUAL com/googlecode/pngtastic/core/PngPixel.getAlpha ()I
ALOAD 0
GETFIELD com/googlecode/pngtastic/core/PngColorCounter.minAlpha : I
IF_ICMPLE L31
```

```
L28
FRAME FULL [com/googlecode/pngtastic/core/PngColorCounter com/googlecode/pngtastic/core/PngImage java/util/List J java/util/LinkedHashMap com/googlecode/pngtastic/core/PngImageType I I java/util/Iterator [B I java/io/ByteArrayInputStream java/io/DataInputStream I I I I I com/googlecode/pngtastic/core/PngPixel java/lang/Integer] [java/util/LinkedHashMap com/googlecode/pngtastic/core/PngPixel]
ALOAD 20
INVOKEVIRTUAL java/lang/Integer.intValue ()I
ICONST_1
IADD
```

```
ICONST_1
GOTO L29
```

```
L29
FRAME FULL [com/googlecode/pngtastic/core/PngColorCounter com/googlecode/pngtastic/core/PngImage java/util/List J java/util/LinkedHashMap com/googlecode/pngtastic/core/PngImageType I I java/util/Iterator [B I java/io/ByteArrayInputStream java/io/DataInputStream I I I I I com/googlecode/pngtastic/core/PngPixel java/lang/Integer] [java/util/LinkedHashMap com/googlecode/pngtastic/core/PngPixel I]
INVOKESTATIC java/lang/Integer.valueOf (I)Ljava/lang/Integer;
INVOKEINTERFACE java/util/Map.put (Ljava/lang/Object;Ljava/lang/Object;)Ljava/lang/Object;
POP
L30
LINENUMBER 116 L30
GOTO L31
```

```
L33
LINENUMBER 127 L33
ALOAD 13
INVOKEVIRTUAL java/io/DataInputStream.readUnsignedByte ()I
ISTORE 16
L34
LINENUMBER 128 L34
ALOAD 13
INVOKEVIRTUAL java/io/DataInputStream.readUnsignedByte ()I
ISTORE 17
L35
LINENUMBER 129 L35
ALOAD 13
INVOKEVIRTUAL java/io/DataInputStream.readUnsignedByte ()I
ISTORE 18
L36
LINENUMBER 130 L36
NEW com/googlecode/pngtastic/core/PngPixel
DUP
ILOAD 14
ILOAD 8
ILOAD 16
ILOAD 17
ILOAD 18
ICONST_1
INVOKESPECIAL com/googlecode/pngtastic/core/PngPixel.<init> (IIIIIZ)V
ASTORE 15
L37
LINENUMBER 131 L37
GOTO L38
```

```
ICONST_1
GOTO L44
```

```
L6
LINENUMBER 172 L6
FRAME FULL [com/googlecode/pngtastic/core/PngColorCounter com/googlecode/pngtastic/core/PngImage java/util/List J java/util/LinkedHashMap com/googlecode/pngtastic/core/PngImageType I I java/util/Iterator] []
LDC "7ce854ab-1463-47b3-bdfe-b5d2c2e718eb"
INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/region/Regions.exit (Ljava/lang/String;)V
LDC "5ae62239-f523-4d7d-84fc-4e4451b07e39"
INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/region/Regions.enter (Ljava/lang/String;)V
ALOAD 0
GETFIELD com/googlecode/pngtastic/core/PngColorCounter.log : Lcom/googlecode/pngtastic/core/Logger;
LDC "Full color count=%d"
ICONST_1
ANEWARRAY java/lang/Object
DUP
ICONST_0
ALOAD 5
INVOKEINTERFACE java/util/Map.size ()I
INVOKESTATIC java/lang/Integer.valueOf (I)Ljava/lang/Integer;
AASTORE
INVOKEVIRTUAL com/googlecode/pngtastic/core/Logger.debug (Ljava/lang/String;[Ljava/lang/Object;)V
L64
LINENUMBER 174 L64
ALOAD 0
GETFIELD com/googlecode/pngtastic/core/PngColorCounter.freqThreshold : D
DCONST_0
DCMPL
IFLE L65
```

```
L66
LINENUMBER 175 L66
ALOAD 1
INVOKEVIRTUAL com/googlecode/pngtastic/core/PngImage.getWidth ()J
ALOAD 1
INVOKEVIRTUAL com/googlecode/pngtastic/core/PngImage.getHeight ()J
LMUL
L2D
ALOAD 0
GETFIELD com/googlecode/pngtastic/core/PngColorCounter.freqThreshold : D
DMUL
D2I
ISTORE 9
L67
LINENUMBER 176 L67
ALOAD 5
INVOKEINTERFACE java/util/Map.entrySet ()Ljava/util/Set;
INVOKEINTERFACE java/util/Set.iterator ()Ljava/util/Iterator;
ASTORE 10
```

```
L68
FRAME FULL [com/googlecode/pngtastic/core/PngColorCounter com/googlecode/pngtastic/core/PngImage java/util/List J java/util/LinkedHashMap com/googlecode/pngtastic/core/PngImageType I I I java/util/Iterator] []
ALOAD 10
INVOKEINTERFACE java/util/Iterator.hasNext ()Z
IFEQ L65
```

```
L69
LINENUMBER 177 L69
ALOAD 10
INVOKEINTERFACE java/util/Iterator.next ()Ljava/lang/Object;
CHECKCAST java/util/Map$Entry
ASTORE 11
L70
LINENUMBER 178 L70
ALOAD 11
INVOKEINTERFACE java/util/Map$Entry.getValue ()Ljava/lang/Object;
CHECKCAST java/lang/Integer
INVOKEVIRTUAL java/lang/Integer.intValue ()I
ILOAD 9
IF_ICMPGE L71
```

```
L72
LINENUMBER 179 L72
ALOAD 10
INVOKEINTERFACE java/util/Iterator.remove ()V
```

```
L71
LINENUMBER 181 L71
FRAME APPEND [java/util/Map$Entry]
GOTO L68
```

```
L65
LINENUMBER 183 L65
FRAME CHOP 3
LDC "5ae62239-f523-4d7d-84fc-4e4451b07e39"
INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/region/Regions.exit (Ljava/lang/String;)V
ALOAD 0
GETFIELD com/googlecode/pngtastic/core/PngColorCounter.log : Lcom/googlecode/pngtastic/core/Logger;
LDC "Filtered color count=%d"
ICONST_1
ANEWARRAY java/lang/Object
DUP
ICONST_0
ALOAD 5
INVOKEINTERFACE java/util/Map.size ()I
INVOKESTATIC java/lang/Integer.valueOf (I)Ljava/lang/Integer;
AASTORE
INVOKEVIRTUAL com/googlecode/pngtastic/core/Logger.debug (Ljava/lang/String;[Ljava/lang/Object;)V
L73
LINENUMBER 185 L73
NEW java/util/ArrayList
DUP
ALOAD 5
INVOKEINTERFACE java/util/Map.keySet ()Ljava/util/Set;
INVOKESPECIAL java/util/ArrayList.<init> (Ljava/util/Collection;)V
ASTORE 9
L74
LINENUMBER 186 L74
ALOAD 9
INVOKEINTERFACE java/util/List.iterator ()Ljava/util/Iterator;
ASTORE 10
```

```
L75
FRAME APPEND [java/util/ArrayList java/util/Iterator]
LDC "fdb3b809-00c0-4ea1-a3af-3c44ae743df9"
INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/region/Regions.enter (Ljava/lang/String;)V
ALOAD 10
INVOKEINTERFACE java/util/Iterator.hasNext ()Z
IFEQ L76
```

```
ALOAD 10
INVOKEINTERFACE java/util/Iterator.next ()Ljava/lang/Object;
CHECKCAST com/googlecode/pngtastic/core/PngPixel
ASTORE 11
L77
LINENUMBER 187 L77
ALOAD 11
ALOAD 5
ALOAD 11
INVOKEINTERFACE java/util/Map.get (Ljava/lang/Object;)Ljava/lang/Object;
CHECKCAST java/lang/Integer
INVOKEVIRTUAL java/lang/Integer.intValue ()I
INVOKEVIRTUAL com/googlecode/pngtastic/core/PngPixel.setFreq (I)V
L78
LINENUMBER 188 L78
GOTO L75
```

```
L76
LINENUMBER 190 L76
FRAME SAME
LDC "fdb3b809-00c0-4ea1-a3af-3c44ae743df9"
INVOKESTATIC edu/cmu/cs/mvelezce/tool/analysis/region/Regions.exit (Ljava/lang/String;)V
ALOAD 9
ARETURN
```