



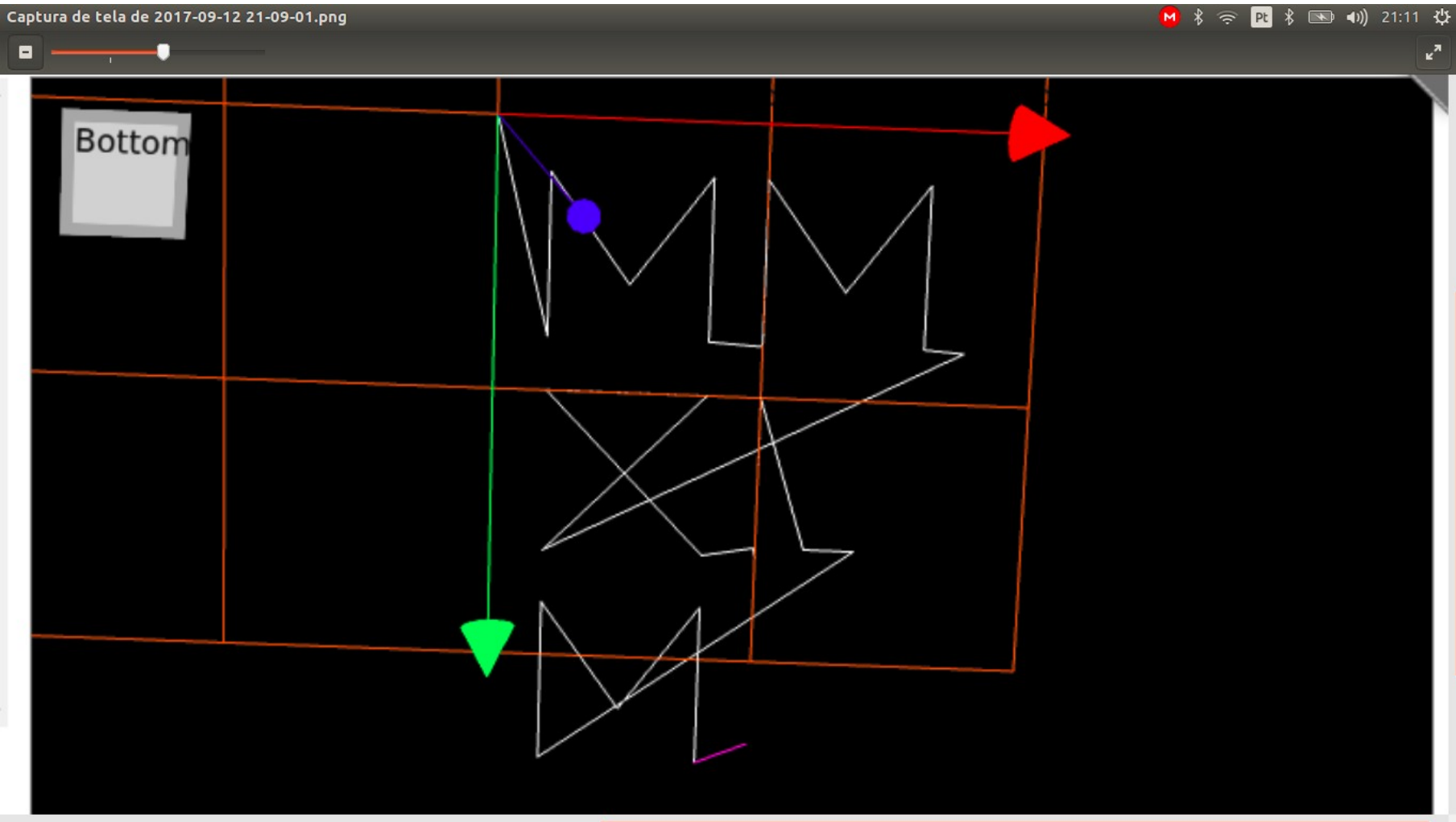
Compiladores



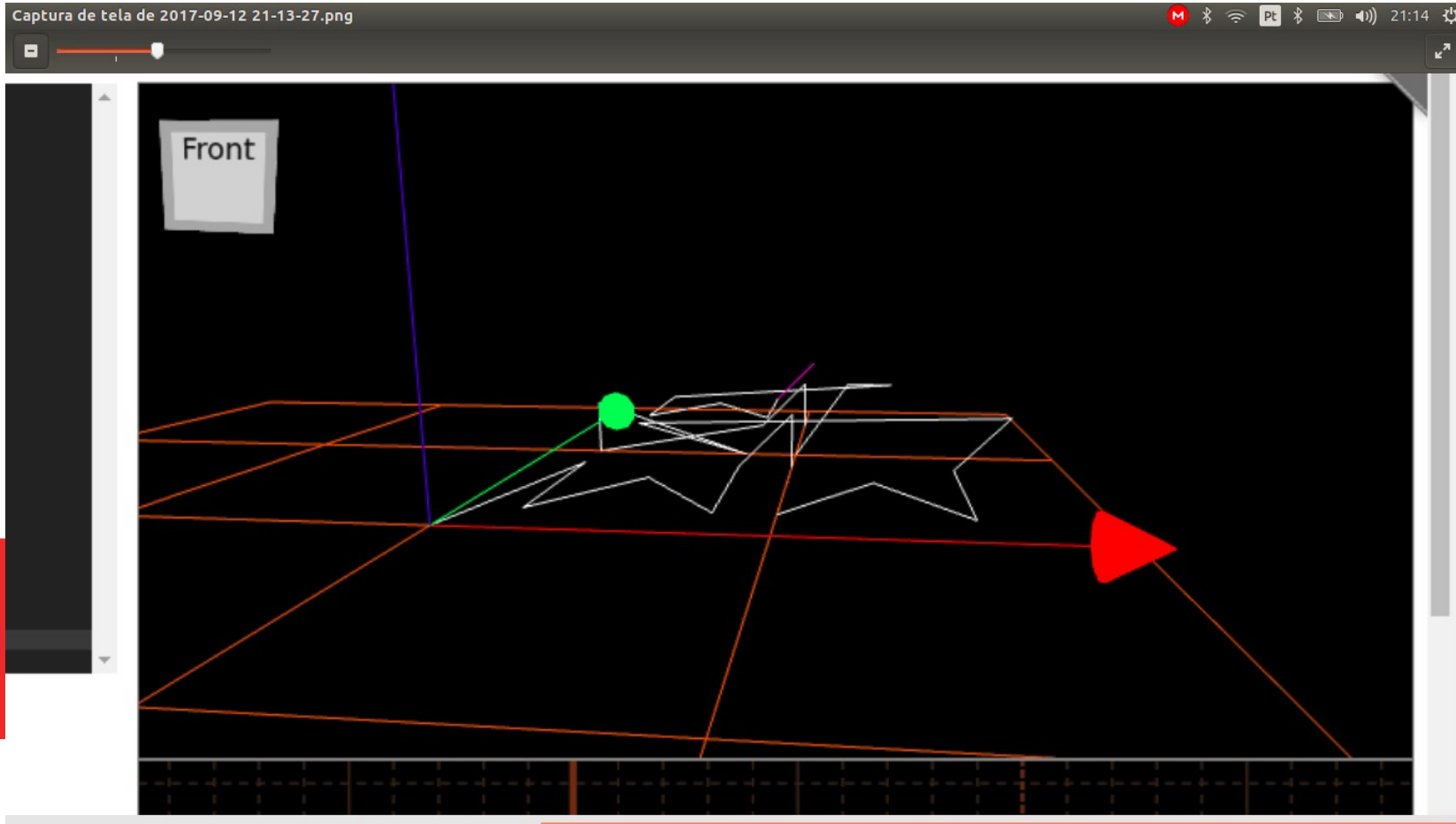
Calculadora de Nº Romanos

Guilherme de Araújo Silva

Imagens de programas



Imagens de programas



Imagens de programas

Captura de tela de 2017-09-12 21-29-26.png

Compiladores [Executando] - Oracle VM VirtualBox

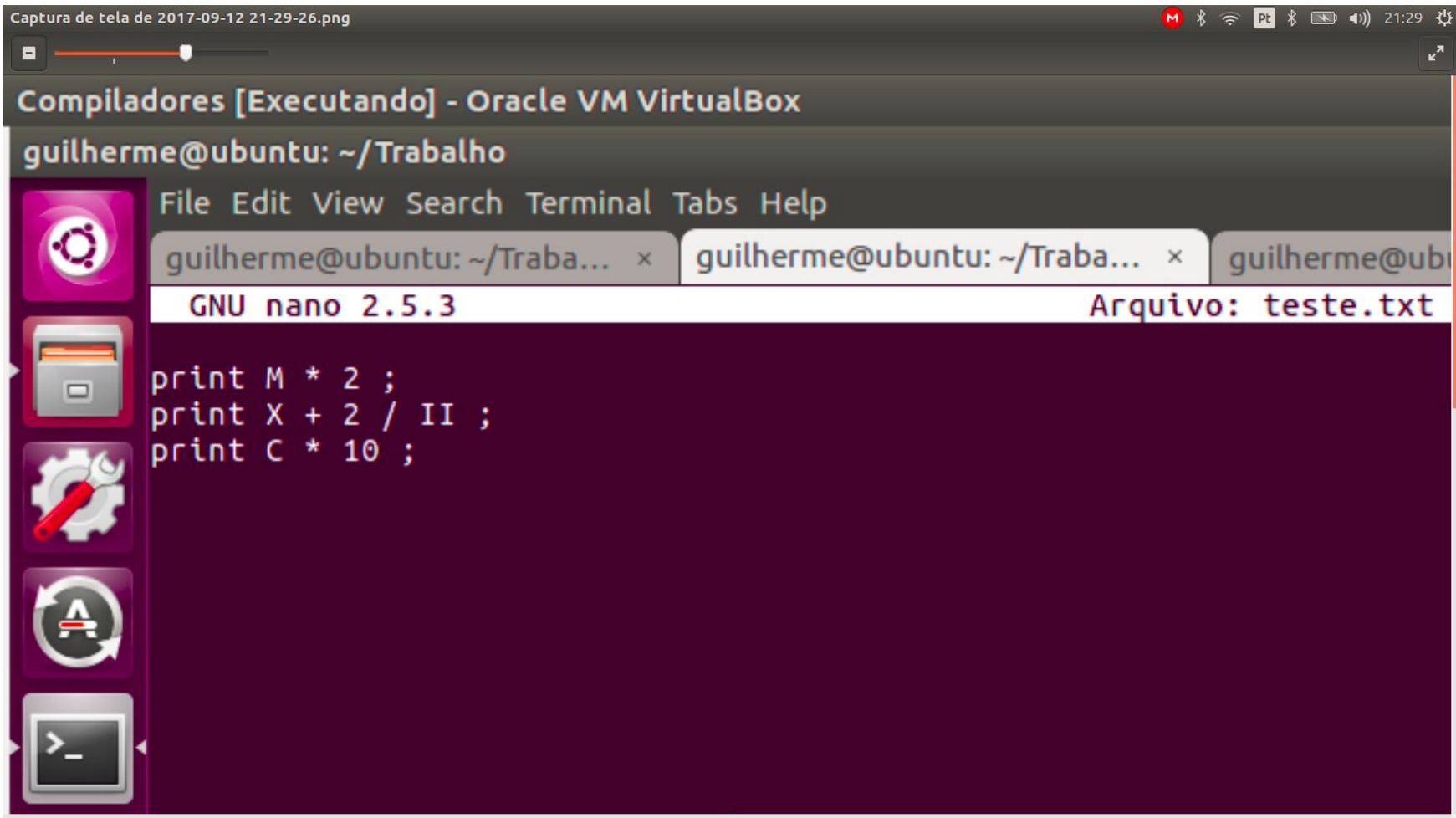
guilherme@ubuntu: ~/Trabalho

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guilherme@ubuntu: ~/Traba... x guilherme@ubuntu: ~/Traba... x guilherme@ubu...

GNU nano 2.5.3 Arquivo: teste.txt

```
print M * 2 ;  
print X + 2 / II ;  
print C * 10 ;
```



Dificuldades

Compiladores [Executando] - Oracle VM VirtualBox

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```
226 Stmt* stmt = new Stmt(node);
227
228 stmt->append(new Variable("x", new Float(CoordX)));
229
230 stmt->append(new If(new CmpOp(node, GT_OP, new Int16(3999)), new Print(new Int16(-1)), NULL));
231
232 stmt->append(new If(new CmpOp(new BinaryOp(node, '/', new Int16(1000)), EQ_OP, new Int16(1)), desenha("M"), NULL));
233 stmt->append(new If(new CmpOp(new BinaryOp(node, '/', new Int16(1000)), EQ_OP, new Int16(2)), desenha("MM"), NULL));
234 ;
235 stmt->append(new If(new CmpOp(new BinaryOp(node, '/', new Int16(1000)), EQ_OP, new Int16(3)), desenha("MMM"), NULL));
236
237 stmt->append(new If(new CmpOp(conta(node, 100), EQ_OP, new Int16(1)), desenha("C"), NULL));
238 stmt->append(new If(new CmpOp(conta(node, 100), EQ_OP, new Int16(2)), desenha("CC"), NULL));
239 stmt->append(new If(new CmpOp(conta(node, 100), EQ_OP, new Int16(3)), desenha("CCC"), NULL));
240 stmt->append(new If(new CmpOp(conta(node, 100), EQ_OP, new Int16(4)), desenha("CD"), NULL));
241 stmt->append(new If(new CmpOp(conta(node, 100), EQ_OP, new Int16(5)), desenha("D"), NULL));
242 stmt->append(new If(new CmpOp(conta(node, 100), EQ_OP, new Int16(6)), desenha("DC"), NULL));
243 stmt->append(new If(new CmpOp(conta(node, 100), EQ_OP, new Int16(7)), desenha("DCC"), NULL));
244 stmt->append(new If(new CmpOp(conta(node, 100), EQ_OP, new Int16(7)), desenha("DCC"), NULL));
245 stmt->append(new If(new CmpOp(conta(node, 100), EQ_OP, new Int16(8)), desenha("DCCC"), NULL));
246 stmt->append(new If(new CmpOp(conta(node, 100), EQ_OP, new Int16(9)), desenha("MC"), NULL));
247
248 stmt->append(new If(new CmpOp(conta(node, 10), EQ_OP, new Int16(1)), desenha("X"), NULL));
249 stmt->append(new If(new CmpOp(conta(node, 10), EQ_OP, new Int16(2)), desenha("XX"), NULL));
250 stmt->append(new If(new CmpOp(conta(node, 10), EQ_OP, new Int16(3)), desenha("XXX"), NULL));
251 stmt->append(new If(new CmpOp(conta(node, 10), EQ_OP, new Int16(4)), desenha("XL"), NULL));
252 stmt->append(new If(new CmpOp(conta(node, 10), EQ_OP, new Int16(5)), desenha("L"), NULL));
253 stmt->append(new If(new CmpOp(conta(node, 10), EQ_OP, new Int16(6)), desenha("LX"), NULL));
```

251,1 92%

Dificuldades

Compiladores [Executando] - Oracle VM VirtualBox

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guilherme@ubuntu: ~/Traba... x guilherme@ubuntu: ~/Traba... x guilherme@ubuntu: ~/Traba... x guilherme@ubuntu: ~ x guilherme@ubuntu: ~/Traba... x

```
    return stmt;
}

Node* M(){
    //CoordY-=3;
    Stmts* stmt = new Stmts(new LinearMove(new Load("x"),new Float(CoordY),new Float(CoordZ)));
    CoordY-=3;
    stmt->append(new LinearMove(new Load("x"),new Float(CoordY),new Float(CoordZ)));
    CoordY+=2;
    //CoordX+=1.5;
    stmt->append(new Variable("x",new BinaryOp(new Load("x"),'+',new Float(1.5))));
    stmt->append(new LinearMove(new Load("x"),new Float(CoordY),new Float(CoordZ)));
    CoordY-=2;
    //CoordX+=1.5;
    stmt->append(new Variable("x",new BinaryOp(new Load("x"),'+',new Float(1.5))));
    stmt->append(new LinearMove(new Load("x"),new Float(CoordY),new Float(CoordZ)));
    CoordY+=3;
    stmt->append(new LinearMove(new Load("x"),new Float(CoordY),new Float(CoordZ)));
    return stmt;
}

Node* decimalToarabic(Node* node){

    Stmts* stmt = new Stmts(node);

    stmt->append(new Variable("x",new Float(CoordX)));
```

181,1-8 79%

Ctrl Direito

Lógica do Compilador

- Os números romanos são convertidos no léxico
- Depois de todas as operações uma função chamada na gramática converte novamente para caracteres
- E por último, são desenhados.





Obrigado