

# The Music of Programming

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# Printemptation ►



# Critics

- ▶ **On the positive side:**

- ▶ Beautiful
- ▶ Easy to remember, hear it once, you got it!
- ▶ Whistled it all day long
- ▶ Feels like I've heard it before but. . .

- ▶ **On the negative side:**

- ▶ Easy listening
- ▶ Elevator music

## On the positive side

- ▶ **Beautiful:** your sense of aesthetics
- ▶ **Easy to remember:** simplicity, obviousness
- ▶ **Feels like I've heard it before:** universality
  
- ▶ **Why ?**
  - ▶ A simple melodic pattern
  - ▶ II V I's harmonic progression (99.999% of occidental music)
  
- ▶ **The music speaks your language, in simple terms**
  
- ▶ **Can we say as much about our programs ?**

# Printtemptation under the Hood ▶

♩ = 200

The musical score consists of several staves of music in 4/4 time, with a tempo of 200 bpm. The key signature has three flats (B-flat, E-flat, A-flat). The first staff has a circled 4/4 time signature. The second staff has a circled 4/4 time signature. The third staff has a circled 8/4 time signature. The fourth staff has circled 8/4, 3/4, and 4/4 time signatures. The fifth staff is the bridge, with circled 8/4 and 4/4 time signatures. The sixth staff has circled 8/4 and 4/4 time signatures. The seventh staff is empty.

Chords and markings:

- Staff 1: E<sub>b</sub>-7<sup>9</sup>, B<sub>b</sub>7(13), E<sub>b</sub>-7<sup>9</sup>
- Staff 2: F-7, B<sub>b</sub>7(13), E<sub>b</sub>-7<sup>9</sup>, A<sub>b</sub>7(13), D<sub>b</sub>-7<sup>11</sup>(9)
- Staff 3: F<sup>7</sup>(13), E-7<sup>9</sup>, A<sub>b</sub>7(13), D $\Delta$
- Staff 4: G<sup>7</sup>9/13, D-7<sup>9</sup>, G7(13), C-7<sup>9</sup>, F7(13), B<sub>b</sub>-7
- Staff 5: A-7, D7, C-7, F7
- Staff 6: G<sup>7</sup>9/13, E<sub>b</sub>-7<sup>5</sup>, A<sub>b</sub>7-13, D<sub>b</sub>-7<sup>5</sup>, F<sup>7</sup>-13, F7-13, B<sup>6</sup>9
- Staff 7: (F-7<sup>5</sup> B<sub>b</sub>7-13)

**Bridge** (Walking)

x4

FILL

x4

FILL

## On the negative side

- ▶ **Easy listening:** simplicity, no surprise
- ▶ **Elevator music:** Easy is boring
  
- ▶ But is this song “simple” and “easy”, really ?
  
- ▶ **This song expresses a complex problem, in simple terms**
  
- ▶ **Can we say as much about our programs ?**

## Conclusion

- ▶ The purpose of a song is to be good
  - ▶ The purpose of a program is to be correct
  - ▶ **A bad program can still be correct**
- 
- ▶ **Keep the music of programming in mind**

**“Anyone can make the  
simple complicated.**

**Creativity is making  
the complicated  
simple.”**

**Charles Mingus**  
jazz icon

