

# Code Songs

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Seven Songs for voice (middle C to top A, choral soprano range, also possible for a mezzo-soprano) and piano

Lyrics from famous programs as follows. Code used in the hope that no one will mind; if there is a copyright issue for use of your program, get in touch.

## 1. Hello World in C

<http://c2.com/cgi/wiki?HelloWorld>

## 2. Quine's Paradox

Due to Willard Van Orman Quine

## 3. Python program for activities

Program 10 here: <http://wiki.python.org/moin/SimplePrograms>

## 4. Quine in C

Aldo Cortesi

<http://c2.com/cgi/wiki?QuineProgram>

## 5. Recursive routine in Fortran 77

Andrew J. Miller

<http://www.esm.psu.edu/~ajm138/fortranexamples.html>

## 6. Quine in scheme

<http://c2.com/cgi/wiki?QuineProgram>

## 7. forkbomb.pl

Alex McLean

<http://runme.org/project/+forkbomb/>

Also see:

<http://mitpress.mit.edu/books/speaking-code-0>

Can insert one or more SuperCollider sc140 tweets between movements as interludes;  
the singer can even recite the code of one as it plays

# Code Songs

All tempi can be taken slower  
as voice requires

## 1. Hello World in C

Nicholas M Collins

**Mezzo-soprano**

**Piano**

hash in clude less than stan dard I O dot h

greater than main left pa ren the sis right pa ren the sis left brace

print f left pa ren the sis dou ble quote Hel lo world

dou ble quote right pa ren the sis se mi co lon right brace

Tempo markings:  $\text{♩} = 116$ ,  $\text{♩} = 110$ ,  $\text{♩} = 100$ ,  $\text{♩} = 160$ ,  $\text{♩} = 100$ ,  $\text{♩} = 126$ ,  $\text{♩} = 100$ ,  $\text{♩} = 160$ ,  $\text{♩} = 100$ ,  $\text{♩} = 160$ ,  $\text{♩} = 100$

Dynamic markings: *mf*, *mp*, *f*, *p*, *mf*, *f*, *mp*, *p*, *f*, *mp*, *f*, *mp*, *p*, *mf*, *mf*, *mf*, *mp*

Rehearsal marks: 5, 10, 15

Measure numbers: 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20

Time signatures: 4/4, 3/4, 7/8, 2/4, 5/8, 9/16, 2/4

### 2. Quine's paradox

$\text{♩} = 100$

*f* *mp*

M-S. *f* *mp*

left quote yields false hood when pre ce ded by its quo ta tion

Pno. *f* *mp*

23 *f* *mf* *f* *pp*

right quote yields false hood when pre ce ded by its quo ta tion

*f* *mf* *f* *pp*

## 3. Python program for activities

27  $\text{♩} = 80$  *f*

from time import local time activities equals left brace eight

31  $\text{♩} = 60$  *pp*  $\text{♩} = 80$  *f*

colon single quote sleep\_\_\_ing single quote comma nine colon single quote

35

commuting single quote comma seven\_\_\_teen\_\_\_ comma single quote

39

work ing single quote comma eight een co\_\_\_lon single quote

43

commuting single quote comma ma twenty colon single quote eat ing

47

$\text{♩} = 60$   
*pp*

single quote comma twenty two colon single quote rest ing

*p* *f* *pp*

51

$\text{♩} = 80$   
*f* *mp*

single quote right brace time dash now equals local time left pa ren the sis right pa ren the sis

*f* *mp*

54

*p* *f*

hour equals time dash now dot t m dash hour for ac ti vi ty dash time sorted

59 *p* *f* *p* *f* *p*  
left pa ren the sis ac ti vi ties dot keys left pa ren the sis right pa ren the sis

64 *f* *p* *f*  
right paren thesis colon if hour\_ less\_ than ac ti vi ty dash time colon

69 *mp*  
print ac ti vi ties left bra cket ac ti vi ty dash time right bra cket break

73 *p*  
else co lon print sin gle quote un known

75 *mp* *mf*  $\text{♩}=60$   $\text{♩}=80$  *f* *ff*

com ma A F K or sleep ing ex cla ma tion sin gle quote

*mp* *mf* *f*

### 4. Quine in C

78  $\text{♩} = 96$  *f*

int\_ main left pa ren the sis void\_ right pa ren the sis left brace char str left brack et

83 *mp* *p* *f*

right brack et e quals dou ble quote int main left pa ren the

87

sis void\_ right pa ren the sis leftbrace char str left brack et right brack et e quals

91 *p* *mp*

per cen tage c per cen tage s per cen tage s semi\_ co lon print f left parenthesis



94

str comma O x 2 2 com ma str comma O x 2 2 right pa ren the sis se mi colon

98 *f*

right brace dou ble quote se mi co lon print f leftparenthesis str com ma O x 2 2 comma

102

str com ma O x 2 2 right parenthesis se mi co lon rightbrace

## 5. Recursive routine in Fortran 77

106 *mp* *mf*

pro gram main in te ger N com ma X ex ter nal sub 1 com mon slash glo bals slash N

109

e quals\_ ze ro print ast e risk comma sin gle quote enter num ber of re peats

112

sin gle quote read left pa ren the sis ast e risk com ma ast e risk right pa ren the sis

114 *p* *f* *p*

N call sub1 left pa ren the sis X com ma sub 1 right pa ren the sis end

The musical score is written for voice and piano. It consists of four systems of music, each with a vocal line and a piano accompaniment. The key signature is one flat (Bb) and the time signature is 5/4. The score includes dynamic markings such as *mp*, *mf*, *p*, and *f*. The lyrics are Fortran 77 code snippets. The piano accompaniment features various textures, including sustained chords, moving lines, and arpeggiated figures. The vocal line is melodic and follows the rhythm of the lyrics.

117 *mf*

sub rou tine sub 1 left pa ren the sis X com ma dum sub

120 *mp*

right pa ren thesis int e ger N com ma X ex ter nal dum sub

123 *p* *mf*

com mon slash glo bals slash N if left pa ren the sis X dot L

126

T dot N right pa ren the sis then X e quals X plus 1 print ast e risk com ma

130

sin gle quote X e quals sin gle quote comma X call dum sub

133

left pa ren the sis X com ma dum sub right pa ren the sis end if end

*p*

6. Quine in scheme

free time recitative

♩=168

*mf*

optionally, choose one dynamic per figure;  
singer may also choose tempi and pause as  
needed for breath

136

left pa ren thesis left pa ren thesis lambda left pa ren the sis x right pa ren the sis

*mp* sustain chords via pedal under vocal line over multiple bars

141

left pa ren the sis qua si quote left pa ren the sis left pa ren the sis un quote

♩=138      ♩=168      ♩=108

146

x right pa ren the sis left pa ren the sis quote left pa ren the sis un quote

♩=168      ♩=108

151

x right pa ren the sis right pa ren the sis rightpa ren the sis rightpa ren the sis rightpa ren the sis

♩=168

154

left paren thesis quote left parenthesis lambda x rightpa ren the sis left pa ren the sis

160  $\text{♩}=138$   $\text{♩}=168$   $\text{♩}=108$   $\text{♩}=168$

qua si quote left pa ren the sis left pa ren the sis un quote x right pa ren the sis

165  $\text{♩}=108$   $\text{♩}=168$

left pa ren the sis quote left pa ren the sis un quote x right pa ren the sis

170

right pa ren the sis right pa ren the sis

171

right pa ren the sis right pa ren the sis right pa ren the sis right pa ren the sis

173  $\text{♩} = 80$  *mf*

hash ex cla ma tion mark slash us (e)r slash bin slash perl

178 *f*

no warn ing se mi co lon my si gil strength

182 *mf*

equals si gil ARG V left bra cket ze ro right bra cket plus one se mi co lon

186 *f* *mp* *f*

while left pa ren the sis not fork right parenthesis left brace ex it



189 *mf*

un\_ less mi nus minus si gil strength se mi colon print ze ro se mi colon

193

twist colon while left pa ren the sis fork right pa ren the sis

198 *p* *mf*

leftbrace ex it un less mi nus mi nus si gil strength se mi co lon print onese mi co lon

202 *p* *f*

right brace right brace go to sin gle quote

204

twist single quote if minus minus si gilstrength se mi co lon

The musical score consists of three staves. The top staff is the vocal line, starting in 5/8 time and changing to 4/4 time. It features a melodic line with various notes, including a half note, quarter notes, and eighth notes. There are breath marks (b) and an accent (>) above the notes. The middle staff is the piano accompaniment in the right hand, and the bottom staff is the piano accompaniment in the left hand. Both piano parts are in 5/8 and 4/4 time. The piano accompaniment includes chords and single notes, with a fermata over a note in the right hand and a slur over a group of notes in the left hand.