

# hello SWC bootcamp

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# write code for humans, write data for computers

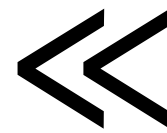


Let us change our traditional attitude to the construction of programs. Instead of imagining that our main task is to instruct a computer what to do, let us concentrate rather on explaining to human beings what we want a computer to do.

**Donald Knuth**



# A place for everything and everything in its place





# source is real



## PERFECT MATCH: TRIFLE WITH MOSCATO

### AT A GLANCE



**SERVES 20 PEOPLE**



**1 HR PREPARATION  
50 MIN COOKING (PLUS COOLING,  
SETTING)**

### *You'll need*

1.5 kg	blackberries or mulberries, plus extra to serve (see note)
300 gm	caster sugar
2	vanilla beans, split and seeds scraped
10	gelatine leaves (titanium strength), softened in cold water for 5 minutes
300 ml	pink moscato
1	lemon, juice only
330 ml	crème de mûre (see note)
125 kg	crème fraîche
150 ml	milk, or enough to thin
2	lemons, finely grated rind only
40 gm	( $\frac{1}{4}$ cup) pure icing sugar, sifted
	<b>Sponge</b>
8	eggs, at room temperature
250 gm	raw caster sugar
250 gm	plain flour, sieved
50 gm	butter, melted and cooled

### *Method*

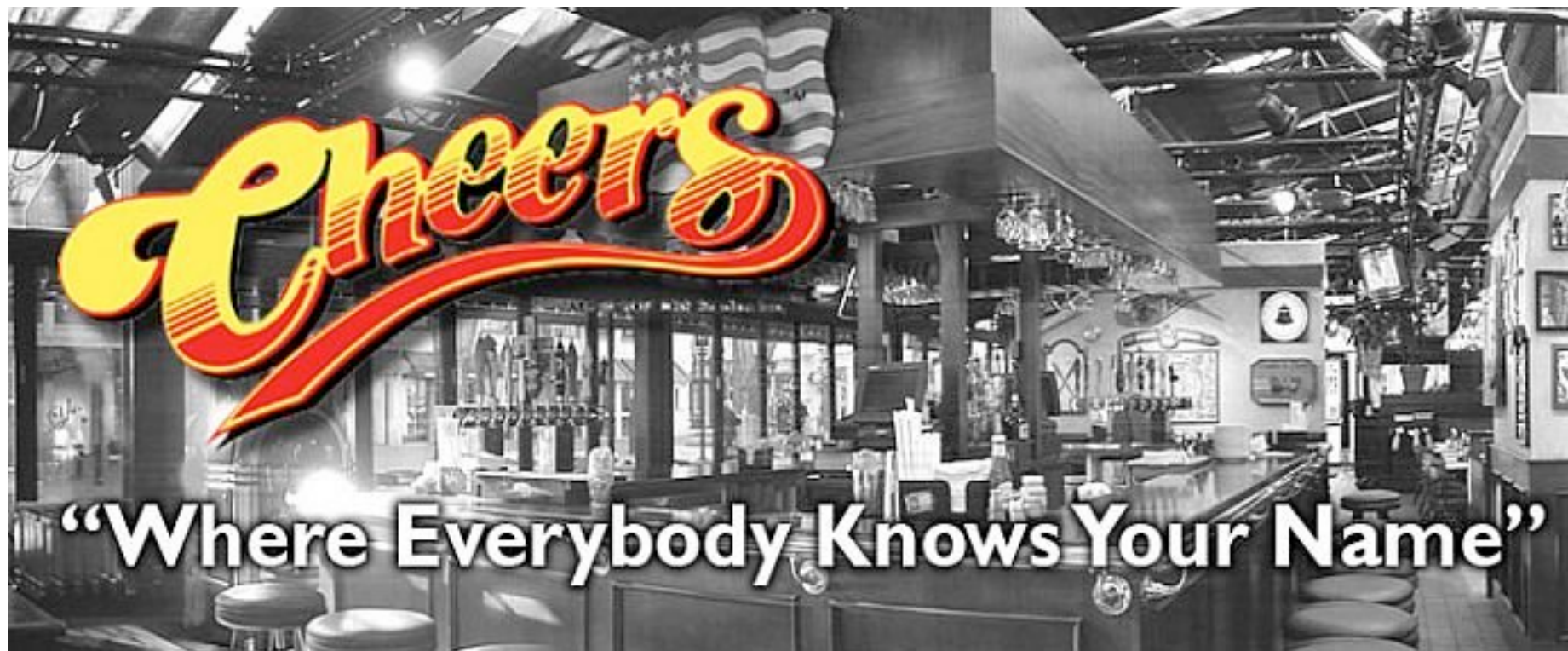
1. For sponge, preheat oven to 175C. Whisk eggs and sugar in an electric mixer until tripled in volume (7 minutes). Fold through flour in batches, fold in butter, pour into a 28cm-square cake tin lined with baking paper. Bake until golden and centre springs back when pressed (20-25 minutes). Cool in tin, turn out, halve sponge horizontally, trim each half to fit a 6 litre-capacity glass bowl, then remove from bowl and set aside, reserving trimmings.
2. Meanwhile, combine 1kg berries, sugar, 1 vanilla bean and seeds and 1.1 litres water in a large saucepan, simmer over low heat until infused (50 minutes). Strain through a fine sieve (discard solids), transfer 1 litre hot liquid to a bowl (reserve remainder). Squeeze excess water from gelatine, add to bowl, stir to dissolve. Add moscato, lemon juice and 80ml crème de mûre. Strain half into trifle bowl, scatter over 250gm berries and refrigerate until set (2-2½ hours). Chill remaining berry jelly, removing from refrigerator if it starts to set.
3. Reduce 250ml remaining liquid (discard excess) over high heat to 50ml or until syrupy (10-15 minutes), refrigerate until required.
4. Meanwhile, combine crème fraîche, milk, rind, icing sugar and remaining vanilla seeds in a bowl, adding extra milk if necessary until spreadable. Spread one-third over set jelly, top with a sponge round, fill any gaps with trimmings, drizzle with 125ml crème de mûre. Scatter over remaining berries, pour over remaining jelly (mixture should be starting to set). Refrigerate until set (2-2½ hours). Top with half the remaining crème fraîche mixture, then remaining sponge. Drizzle with remaining crème de mûre, top with remaining crème fraîche mixture. Cover, refrigerate overnight. Serve scattered with extra berries and drizzled with blackberry syrup.

# source is real

**“The source code is real.** The objects are realizations of the source code. Source for EVERY user modified object is placed in a particular directory or directories, for later editing and retrieval.”

-- from the Emacs Speaks Statistics (ESS) manual

# Names matter





# ain't nothing like the real thing



minimize the creation of excerpts and copies of  
your data ... it will just confuse you later



# reshape your data



data has a tendency to get shorter and wider, but  
tall and thin is better for downstream analysis

you won't believe how important this is:

what is your working directory?

where is the file or executable you need?

you need to be fluent with file paths



tough love:

get better at typing

typos matter

case matters

th\_is is different from th-is

spaces in filenames are EVIL

you want computer to tedious work for you, right?  
then you must give precise instructions