**Homework Question 1: Code for girls:**

**Question 1**

**I am building some very high quality chairs and need exactly four nails for each chair. I've written a**

**program to calculate how many nails I need to buy to build these chairs.**

**chairs = '15'**

**nails = 4**

**total\_nails = chairs \* nails**

**message = 'I need to buy {} nails'.format(total\_nails)**

**print('You need to buy {} nails'.format(message))**

**When I run the program it tells me that I need to buy 15151515 nails. This seems like a lot of nails. Is**

**my program calculating the total number of nails correctly? What is the problem? How do I fix it?**

**Answer:**

Your programme is not calculating the number of nails correctly. The problem is that the number of chairs is in quotations ‘15’. By multiplying this by 4 all you are doing is writing the number 15 four times in a row. To fix this the number 15 needs to not be in quotation marks.

Also, the last line of the code is wrong and I would replace this with print(message) as if not you get a mix of ‘you need to I need to buy 60 nails.’ Which doesn’t make sense.

The correct code looks like this:

chairs = 15

nails = 4

total\_nails = chairs \* nails

message = ‘I need to buy {} nails’.format(total\_nails)

print(message)

output: ‘I need to buy 60 nails’

**Question 2**

**I'm trying to run this program, but I get an error. What is the error telling me is wrong? How do I fix**

**the program?**

**my\_name = Penelope**

**my\_age = 29**

**message = 'My name is {} and I am {} years old'.format(my\_name, my\_age)**

**print(message)**

**Answer:**

The error comes up saying Penelope is not defined. To fix this, because Penelope is a string data type you have to put it in quotations. This will now provide an output that says My name is Penelope and I am 29 years old. The age is an integer and therefore not a string so does not require quotations.

**Question 3:**

**I have a lot of boxes of eggs in my fridge and I want to calculate how many omelettes I can**

**make. Write a program to calculate this.**

**Assume that a box of eggs contains six eggs and I need four eggs for each omelette, but I should be**

**able to easily change these values if I want. The output should say something like "You can make 9**

**omelettes with 6 boxes of eggs".**

**Answer**

boxes\_of\_eggs = 6

per\_egg\_box = 6

omelette\_eggs = 4

number\_of\_omlettes = (boxes\_of\_eggs\*per\_egg\_box)/omelette\_eggs

print('You can make {} omelettes with {} boxes of eggs'.format(number\_of\_omlettes,boxes\_of\_eggs))

Output : ‘You can make 9.0 omelettes with 6.0 boxes of eggs’