Starter - Records

These tasks are designed to refresh the reading and research you have undertaken at home prior to this lesson. If you have not completed the R&R assignment then please speak to your teacher before attempting these exercises.

Task 1 - Code Review

What will happen when the program below is run and a user enters the following information at the prompts:

- USA
- Washington

```python
#define record
class Country:
    def __init__(self):
        self.name = 'UK'
        self.capital = 'London'
#main program
country = Country()
country_name = input('Enter the name of the next country: ')
country_capital = input('Enter the name of the capital city: ')
print('The capital of {0} is {1}.'.format(country.name,
country.capital))
```

space for your answer:

It will print 'the capital of UK is London'

Task 2

What change or changes would correct the problems with the following definition of Student:

```
class Student:
def __init__(self):
    name = '-'
    tutor = ''
```

Space for your answer:

The blank strings could be changed to 'None'

Task 3

How many GamePlayers are there after running the following program? How could this be improved?

```
#define record
class GamePlayer:
        def __init__(self):
            self.name = ''
            self.ability = ''

#main program
for index in range(3):
        character = GamePlayer()
        character_name = input("Enter the name of your character:
")
        character.name = character_name
        character_ability = input("What is your character's
special ability? ")
        character.ability = character_ability
        print("Character {0} has been
created".format(character.name))
```

Space for your answer:

There are 3 players.

It could be improved by having a list of records so each individual character would be saved, instead of just printed out.

Task 4

What will happen when the following program is run? What change or changes would improve it?

```python
class GBAthlete:
    def __init__(self):
        self.name = '-'
        self.event = '-'
        self.medal = None

#main program
#create relay team
relay_team = []
#add athletes to relay team
for index in range(4):
    athlete = GBAthlete()
    athlete.name = input('Name of athlete: ')
    athlete.event = '4 x 100m (men)'
    relay_team.append(athlete)
#print relay team members and event
for index in range(1,len(relay_team)):
    print('{0} is in the {1}'.format(relay_team[index].name,
relay_team[index].event))
```

Space for your answer:

It would print the 2nd, 3rd and 4th members of the '4 x 100m (men) team

It could be improved by setting the range to the correct values so the entire team would be printed