#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:\*\*

The message it will display is

`"The capital of UK is London."`

this will happen because the a "\_" is being used instead of an "."

##Task 2

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

```python

class Student:

def \_\_init\_\_(self):

name = '-'

tutor = ''

```

\*\*Space for your answer:\*\*

```python

class Student:

def \_\_init\_\_(self):

self.name = None

self.tutor = None

```

##Task 3

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

```python

#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 will be 3 players after this program has finished running

```python

#define record

class GamePlayer:

def \_\_init\_\_(self):

self.name = ''

self.ability = ''

#main program

#Control the amount of players

player\_count = int(input("How many players would you like in your game?: ")

for index in range(player\_count):

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

#And a description to the character

print("Character {0} has been created their ability is to {1]".format(character.name,character.ability))

```

##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:\*\*

```python

class GBAthlete:

def \_\_init\_\_(self):

self.name = None

self.event = None

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))

```