# String Manipulation Tasks

**Part 0:**

Before you start, download the 'strings.py' file.
You should have a printed copy of the program to help you.
Run the program.

**Part 1:**

Explain, in your own words, the effect of using .upper():

What would happen if I ran this code? Why?

```
school = "Egglescliffe"
print(school.lower())
```

What would happen if I ran this code? Why?

```
school = "Egglescliffe"
if school == "egglescliffe".upper():
    print("School is a match")
else:
    print("School is not a match")
```

Improve this code to make the program better:

```
print("Would you like a free cookie?")
choice = input("Type Y or N: ")
if choice == 'y':
    print("Have a free cookie!")
```

Now move on to Part 2 in the program.

**Part 2:**

What would happen if I ran this code? Why?

```
icecream = "raspberry ripple"
print(icecream[2])
```

Write down the line of code I would need to print "b"

Using the code below would print "asp"
Write down the line of code I would need to print "berry"

```
print(icecream[1:3])
```

Using the code below would print from character 10 to the very end ("ripple").
Write down the line of code I would need to print "raspberry"

```
print(icecream[10:] )
```

Now move on to Part 3 in the program.

**Part 3:**

What would happen if I ran this code? Why?

```
password = "michaela"
output = ""
for letter in password:
    if letter == "a":
        output = output + "@"
    elif letter == "e":
        output = output + "3"
    else:
        output = output + letter
print(output)
```

Now move on to Part 4 in the program.

**Part 4:**

What would happen if I ran this code? Why?

```
options = "Maths/English/French/German/Politics"
output = options.split("/")
print(options)
```

In the following code, explain why it is so important to say that total = 0 before the loop starts.

```
total = 0
for word in output:
if word == "wood":
    print("I found one!")
    total = total + 1
```

Now move on to Part 5 in the program.

**Part 5:**

Complete the following programming exercises.

When finished, glue this booklet into your book - with this side against the page.

**Program 1**

Ask a user for their name. Print it 3 times - as they typed it, all caps and all lower case

**Program 2**

Ask a user for their first name, and then their surname. Print out their username, assuming they are in Y7 (e.g. Dave Smith = smithd16)

**Program 3**

Ask a user for their name. Print out which vowels it has in it
(e.g. "Dave" has 'a' and 'e', "Angelica" has 'a', 'e' and 'i')

**Program 4**

Ask a user for their name. Count how many vowels there are in the name in total.
Extension: Count how many of each vowel appears in that name.

**Program 5**

Ask a user to type in a sentence. Find out if there are any duplicate words. Print out one copy of any words that are duplicated.

**Program 6**

Ask a user for their favourite activity. If it ends with 'ing' then say "I like to ..." as well - without the 'ing'.
e.g. Activity - building. I like to build too
NB: it may help to know that `len(word)` will return how many characters are in that word.