### **HW#0 - Homework Report**

Sofia Huang 09/02/2022 (due 09/13/2022)

# **Q**1

You may copy the question into your report, but make sure that you make it clear where the question ends and your answer begins.

#### **Answer**

All figures must have a caption and must be referenced in the text. Example below.

Figure 1 shows the graph of the trigonometry function y = sin x.

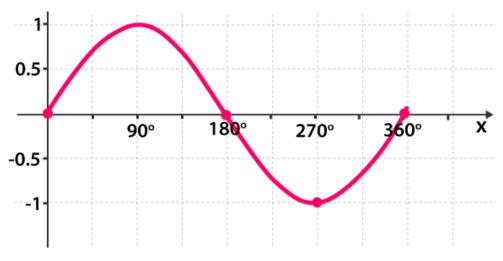


Figure 1: Sine Graph

If you want to include code in your report, you can insert a screenshot (if it's legible), or you can copy/paste the code into a listings environment. There are examples below and more information is available at https://www.overleaf.com/learn/latex/code\_listing.

Listing 1 is an example of directly copying code into the LaTeX document and having the listings package perform syntax highlighting. Listing 2 is an example of importing the code from a file rather than copying it in.

```
5    a = a/b
6    print("Success a=",a)
7 except ZeroDivisionError:
8    print("The number you provided cant divide 1 because it is 0")
9 except ValueError:
10    print("You did not provide a number")
11 except:
12    print("Something went wrong")
```

**Listing 1:** Python example copied into the LaTeX

```
1 a = 1
2
3 try:
4    b = int(input("Please enter a number to divide a"))
5    a = a/b
6    print("Success a=",a)
7 except ZeroDivisionError:
8    print("The number you provided cant divide 1 because it is 0")
9 except ValueError:
10    print("You did not provide a number")
11 except:
12    print("Something went wrong")
```

**Listing 2:** Python sample code loaded from file

Table 1 shows a simple example table. Table 2 shows an example confusion matrix (you'll see this term later) from https://en.wikipedia.org/wiki/Confusion\_matrix. This employs rows that span multiple columns (multicol) and columns that span multiple rows (multirow).

Table 1:	Simple	e Table
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Week	Date	Topic
1	Sep 1, 6	Introduction to Web Science and Web Architecture
2	Sep 8, 13	Introduction to Python
3	Sep 15, 20	Introduction to Info Vis with R, Python
4	Sep 22, 27	Measuring the Web

**Table 2:** Example Confusion Matrix from Wikipedia

		Actual		
		Cat	Dog	
Predicted	Cat	5 (TP)	3 (FP)	
	Dog	2 (FN)	3 (TN)	

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#### **Discussion**

You must provide some discussion of every answer. Discuss how you arrived at the answer and the tools you used. Discuss the implications of your answer.

**Q2** 

Answer

**Discussion** 

**Q3** 

Answer

**Discussion** 

## References

Every report must list the references that you consulted while completing the assignment. If you consulted a webpage, you must include the URL.

- $\bullet \ Trigonometry \ Graphs, \verb|https://byjus.com/maths/trigonometry-graphs/|$
- StackExchange Can't edit a downloaded template from Overleaf on TexMaker, https://tex.stackexchange.com/questions/593363/cant-edit-a-downloaded-template-from-overleaf-on-texmaker
- How to Create a Folder in Github Repos in 4 Simple Steps https://www.alpharithms.com/how-to-create-a-folder-in-github-repos-463022/