



COLLEGE OF ENGINEERING AND INFORMATION TECHNOLOGY
Department of Information Technology

Name: PRINCESS JADE BANDAL, MIKAELA RAMOS Student No.: 202201865, 202202076
Course / Yr. / Sec.: BSIT 3 -2 Date: June 12, 2025

Laboratory Activity #9: MD5

Instruction/s: Make a Python code that will display an encrypted text. Use the format on the previous activity. Explain the code. By pair

CODE:

```
import hashlib

def generate_md5(text):

    return hashlib.md5(text.encode()).hexdigest()

def main():

    print("MD5 TEXT GENERATOR")

    user_input = input("ENTER YOUR TEXT: ")

    hash_result = generate_md5(user_input)

    print("MD5 Hash:", hash_result)

if __name__ == "__main__":

    main()
```

```
1 import hashlib
2
3 def generate_md5(text):
4     return hashlib.md5(text.encode()).hexdigest()
5
6 def main():
7     print("MD5 TEXT GENERATOR")
8     user_input = input("ENTER YOUR TEXT: ")
9     hash_result = generate_md5(user_input)
10    print("MD5 Hash:", hash_result)
11
12 if __name__ == "__main__":
13    main()
14 |
```

```
▶ Run Share $ Command Line Arguments
MD5 TEXT GENERATOR
ENTER YOUR TEXT:
Hello, World!
MD5 Hash: 65a8e27d8879283831b664bd8b7f0ad4
```



COLLEGE OF ENGINEERING AND INFORMATION TECHNOLOGY
Department of Information Technology

In this program, we create a simple MD5 hash generator using Python. First, we imported the **hashlib** module using **import hashlib** so we could access the MD5 hashing function. One of us wrote the **generate_md5(text)** function, which takes the user's input, converts it into bytes using **text.encode()**, then hashes it using **hashlib.md5()**, and finally returns the result in hexadecimal format with **.hexdigest()**. Meanwhile, the other focused on building the **main()** function, where we printed the title "**MD5 TEXT GENERATOR**" using **print()**, then asked the user to enter a message with **input("ENTER YOUR TEXT: ")**, and stored that input in **user_input**. We passed this value to the hash function and stored the result in **hash_result**, which we displayed using **print("MD5 Hash:", hash_result)**. At the end of our script, we added **if __name__ == "__main__":** to ensure that the **main()** function only runs when the script is executed directly.

Criteria	(Excellent) 5	(Good) 4	(Fair) 2	(Poor) 1	Score
Program execution	Program executes correctly with no syntax or runtime errors	Program executes with slight syntax or runtime errors	Program executes with a minor (easily fixed error)	Program does not execute	
Correct output	Program displays correct output with no errors	Output has minor errors	Output has multiple errors	Output is incorrect	
Design of output	Program displays more than expected	Program displays minimally expected output	Program does not display the required output	Output is poorly designed	
Design of logic	Program is logically well designed	Program has slight logic errors that do not significantly affect the results	Program has significant logic errors	Program is incorrect	