



- Research thesis replaces the final written exam
- The research is individual
- Each part/component of the research has a weight
- Research submission is online in electronic format
- Due date is the date announced by faculty/program administration's schedule
- Research should be submitted in announced Student Template
- Plagiarism checking will be applied. Research is subject to rejection in such case

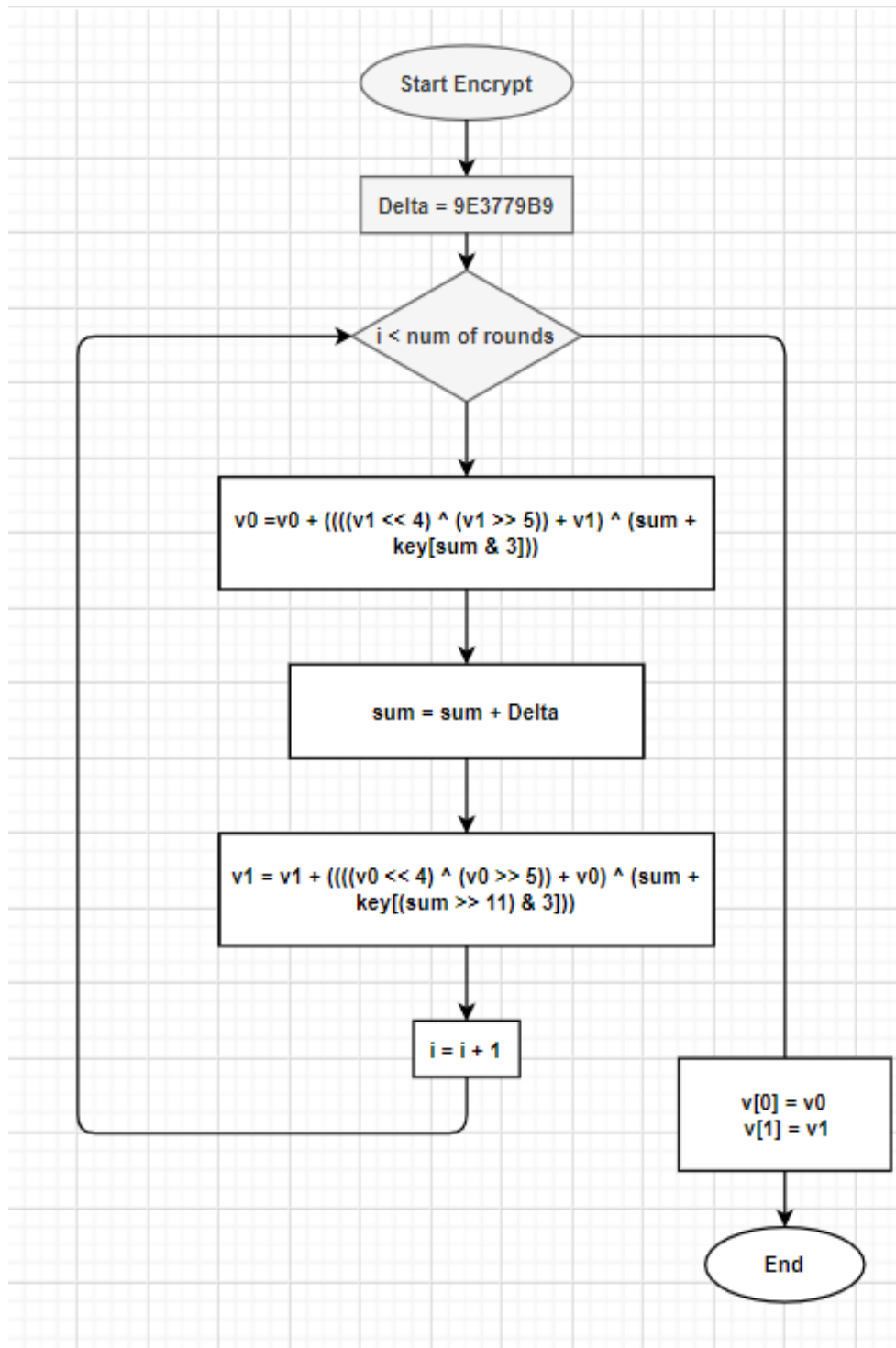
RESEARCH THESIS

| | |
|------------------------|-------------------------------------|
| Program | SWE |
| Level | Second |
| Course Code | CSY 350 |
| Course Title | Microprocessors & Assembly Language |
| Instructor(s) | Dr. Karim Emara |
| Research Title: | Tea Encryption project |

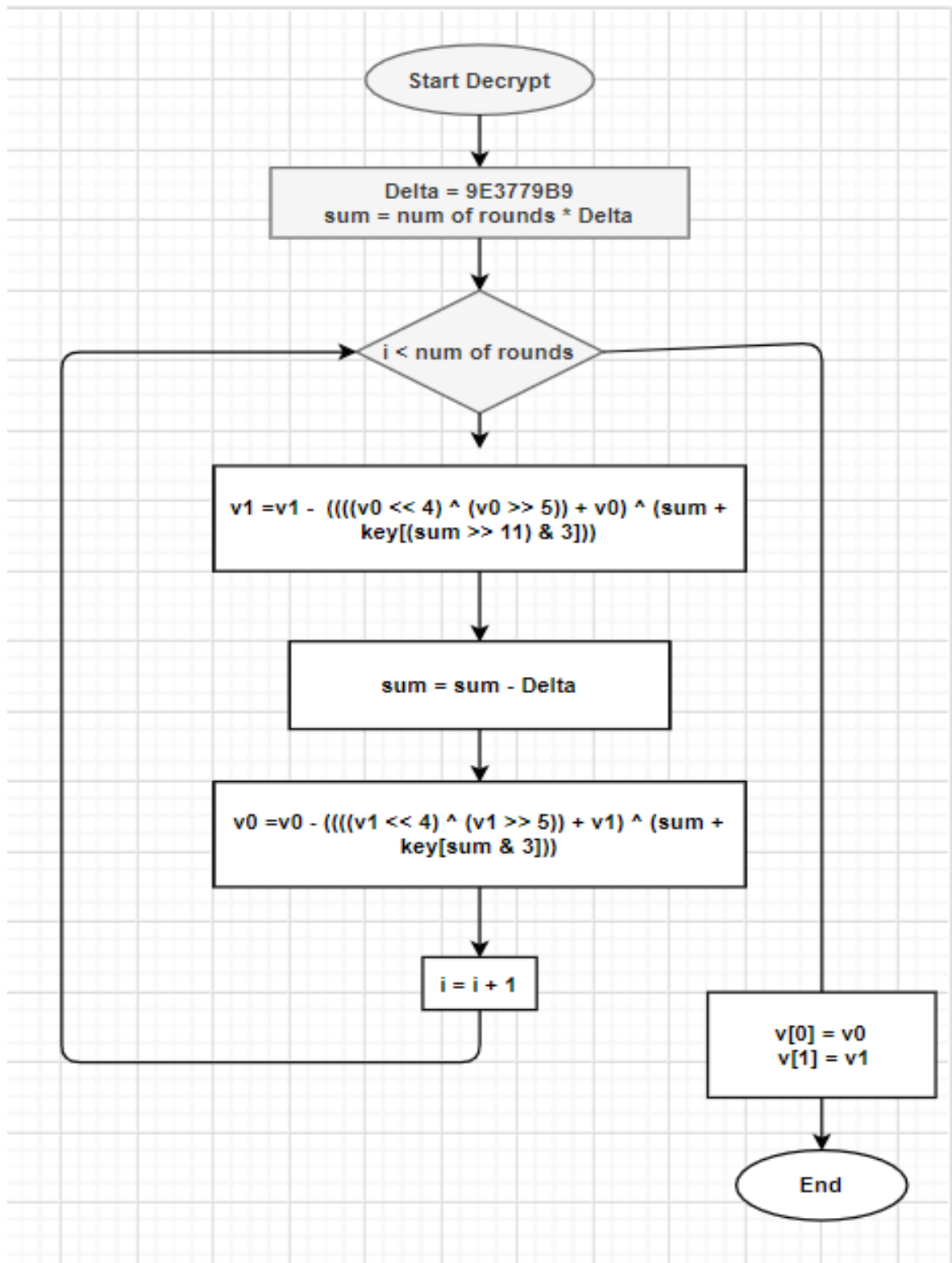
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THROUGH ANY OF THE DOUCMENT PAGES
YOU ARE ONLY ALLOWED TO FILL IN THE GIVEN INFORMATION

1. High-level flowchart of the program logic

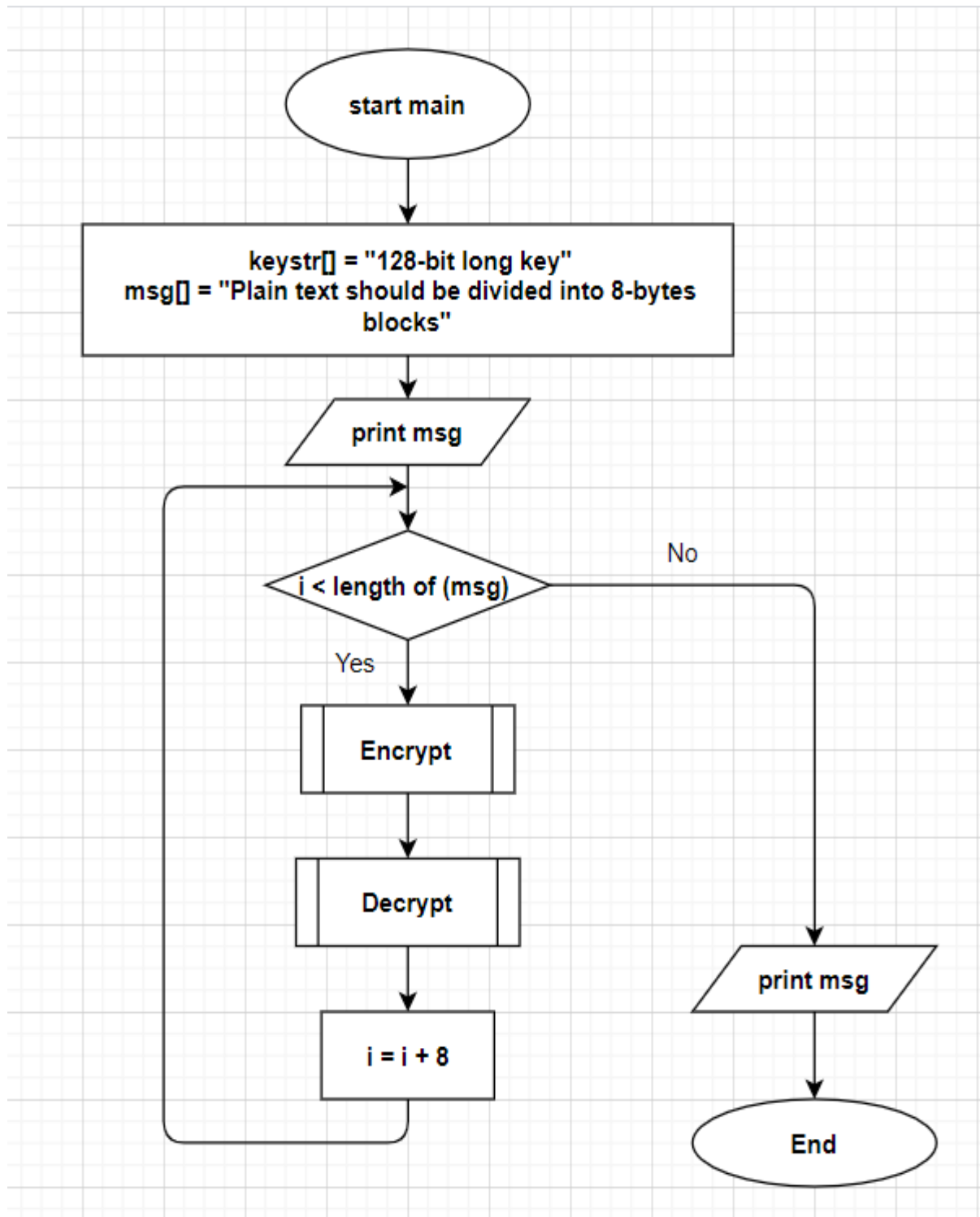
Encrypt function: -



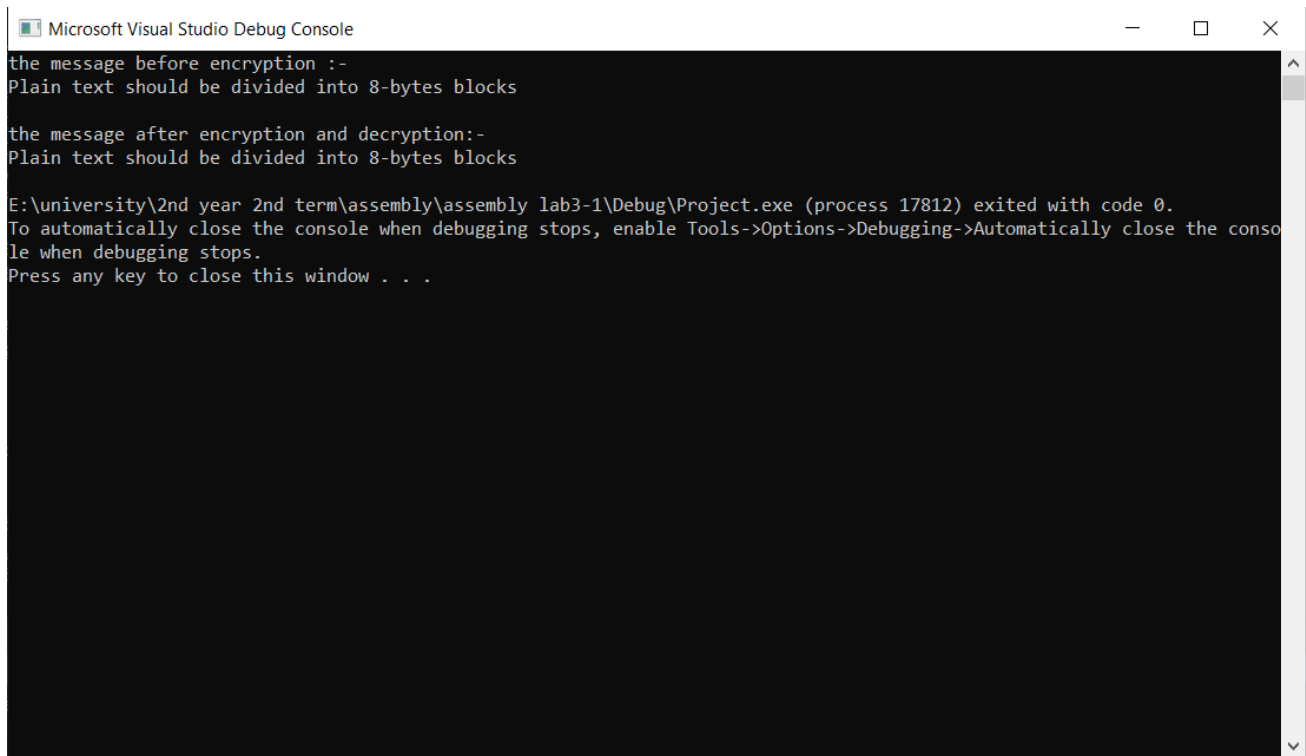
Decrypt function: -



Main: -

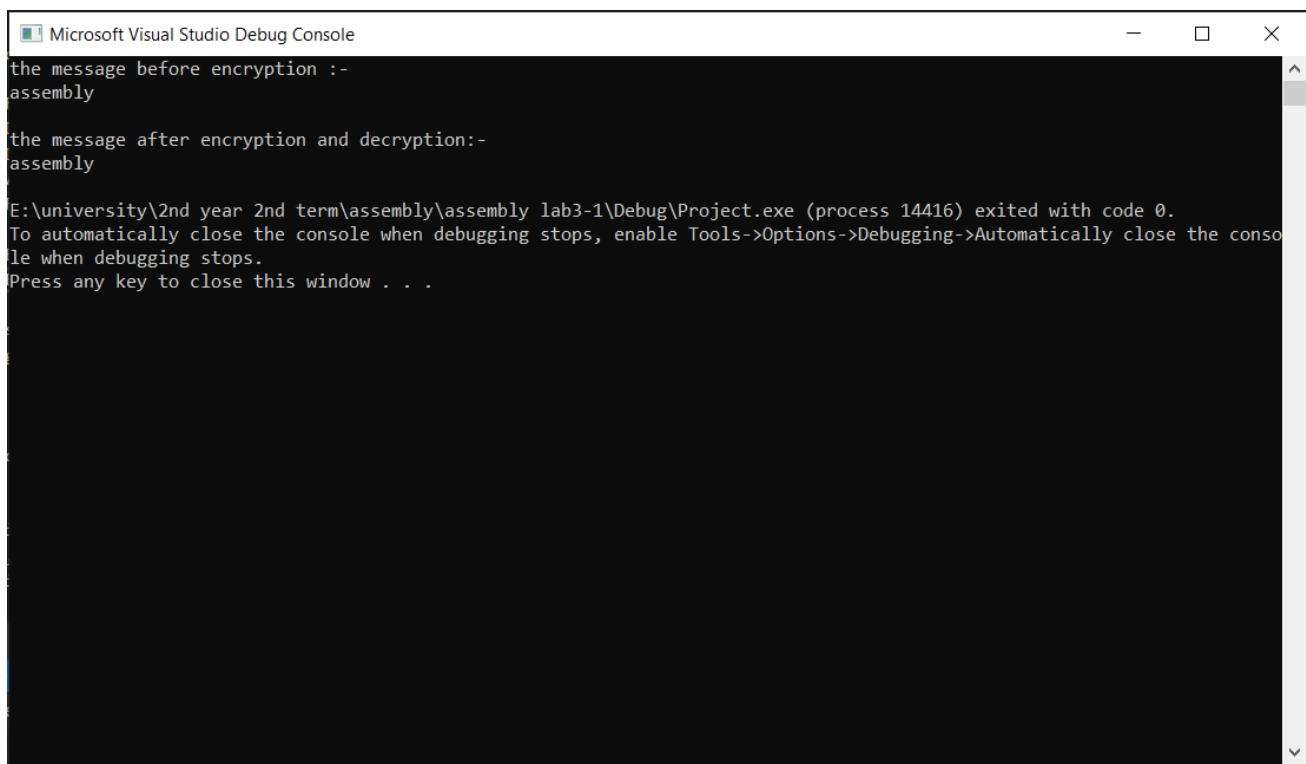


2. Screen shot of runs using several messages



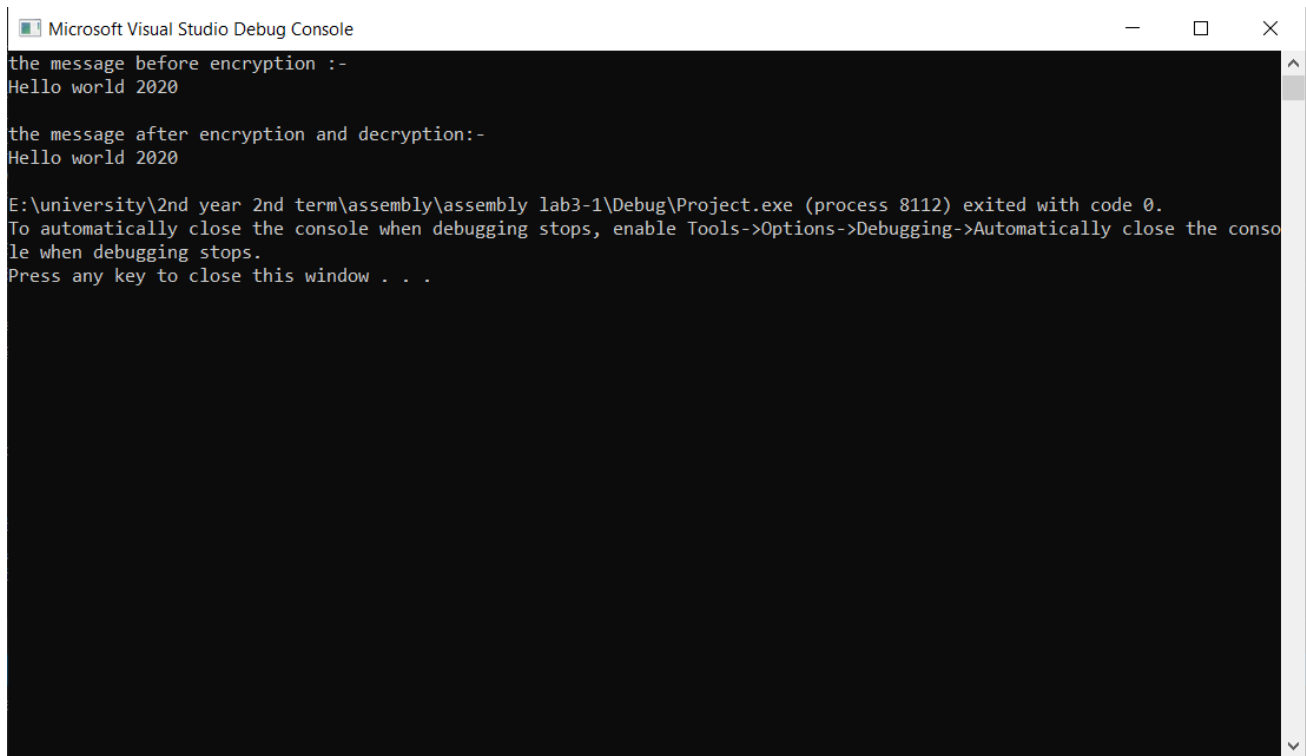
Microsoft Visual Studio Debug Console

```
the message before encryption :-  
Plain text should be divided into 8-bytes blocks  
  
the message after encryption and decryption:-  
Plain text should be divided into 8-bytes blocks  
  
E:\university\2nd year 2nd term\assembly\assembly lab3-1\Debug\Project.exe (process 17812) exited with code 0.  
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.  
Press any key to close this window . . .
```



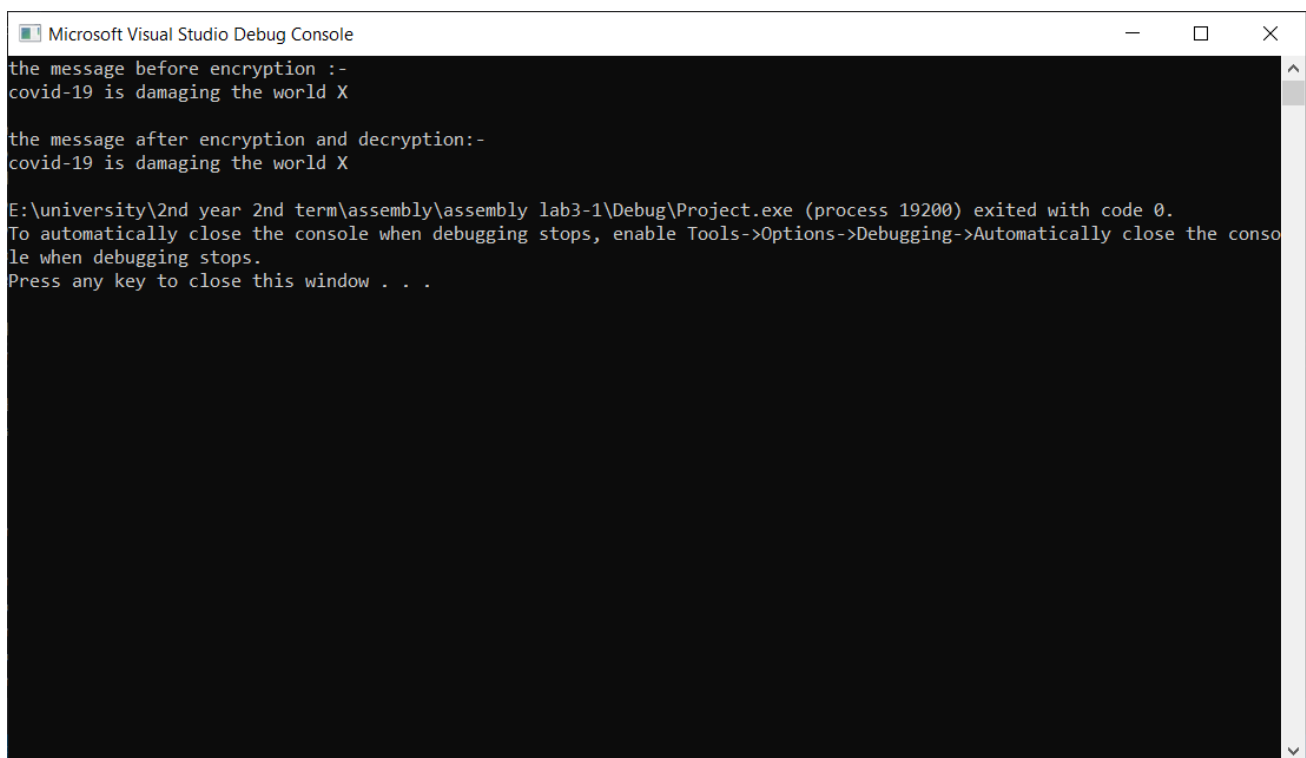
Microsoft Visual Studio Debug Console

```
the message before encryption :-  
assembly  
  
the message after encryption and decryption:-  
assembly  
  
E:\university\2nd year 2nd term\assembly\assembly lab3-1\Debug\Project.exe (process 14416) exited with code 0.  
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.  
Press any key to close this window . . .
```



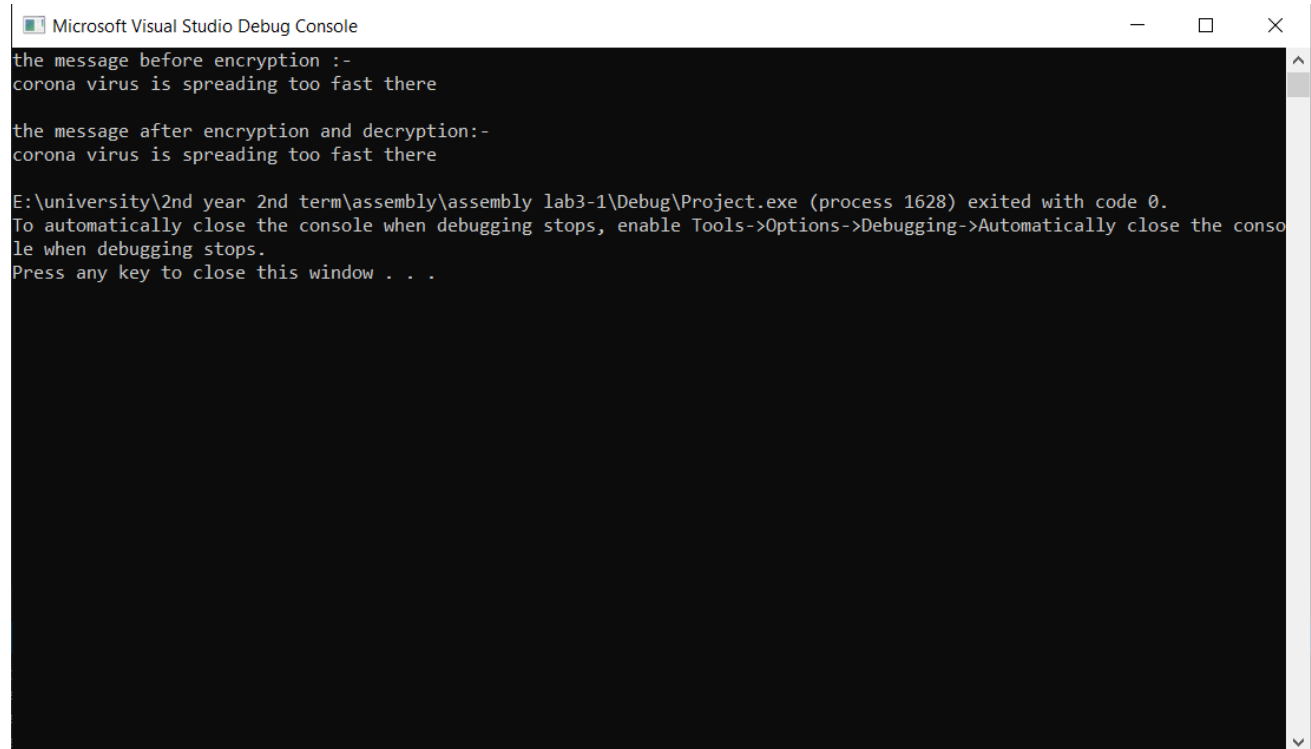
Microsoft Visual Studio Debug Console

```
the message before encryption :-  
Hello world 2020  
  
the message after encryption and decryption:-  
Hello world 2020  
  
E:\university\2nd year 2nd term\assembly\assembly lab3-1\Debug\Project.exe (process 8112) exited with code 0.  
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.  
Press any key to close this window . . .
```



Microsoft Visual Studio Debug Console

```
the message before encryption :-  
covid-19 is damaging the world X  
  
the message after encryption and decryption:-  
covid-19 is damaging the world X  
  
E:\university\2nd year 2nd term\assembly\assembly lab3-1\Debug\Project.exe (process 19200) exited with code 0.  
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.  
Press any key to close this window . . .
```



Microsoft Visual Studio Debug Console

```
the message before encryption :-  
corona virus is spreading too fast there  
  
the message after encryption and decryption:-  
corona virus is spreading too fast there  
  
E:\university\2nd year 2nd term\assembly\assembly lab3-1\Debug\Project.exe (process 1628) exited with code 0.  
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.  
Press any key to close this window . . .
```