```
 1 C:\Users\malateef\Desktop\HybridImplementation\venv\
   Scripts\python.exe C:\Users\malateef\Desktop\
   HybridImplementation\consolidatedApproach.py
 2 Enter the password for the private key ▯: abrar
 3 ▯ AES Encryption Complete. Message encrypted: b"
   Subject: Progress Update and Request for Further
   Guidance\r\n\r\nDear [Guide's Name],\r\n\r\nI hope
   this email finds you well. I wanted to provide you
   with an update on the progress of our project and
   discuss the next steps.\r\n\r\nProgress Update:\r\n\r
   \nOver the past [time period], I have been diligently
    working on attaining the ecryption and decryption
   using the most feasible approach of having both the
   operations handled by two different files. \r\n\r\nI
   have encountered some challenges along the way,
   particularly in having them synchronized, but have
   successfully overcome them consolidating them like
   earlier but with an tricky way to handle the keys.\r\
   nIn my previous approach the system was generating
   the keys and auto-injesting them everytime the
   program is run which is totally absurd from
   cryptography ethics pov. Now that I\xe2\x80\x99ve
   corrected what exactly was the oversight, its fixed
   and the progress is in https://github.com/
   lateefcode2101/Crypto-Fusion \r\n\r\nPlease find the
   below \r\nNext Steps:\r\n\r\nAs we move forward, I am
    planning to focus on [outline your upcoming tasks or
    goals]. This involves [briefly describe the tasks
   and their objectives]. I believe completing these
   tasks will contribute significantly to the overall
   success of the project.\r\n\r\nRequest for Guidance:\
   r\n\r\nWhile making progress, I've come across [
   specific issues or questions you need guidance on]. I
    would greatly appreciate your insights and
   suggestions to overcome these challenges.\r\n\r\
   nAdditionally, I am interested in discussing the
   overall project direction and any adjustments you
   might recommend. Your guidance has been invaluable,
   and I am eager to ensure that the project aligns with
    your expectations.\r\n\r\nAvailability:\r\n\r\nI am
   available for a meeting at your earliest convenience
```

3 to discuss the project in more detail. Please let me know a time that works for you, or if you prefer, we can communicate via email or another preferred method.\r\n\r\nThank you:\r\n\r\nThank you for your ongoing support and guidance throughout this project. I am committed to delivering the best possible results and value your expertise in steering the project in the right direction.\r\n\r\nLooking forward to hearing from you soon.\r\n\r\nBest regards,\r\n\r\n[Your Full Name]\r\n[Your University ID or Department]\r\n[Your Contact Information]\r\n"

4 ✅ RSA Encryption Complete. AES Key encrypted: b'2f1a3a11c1f3b525be2378dab2f9651b'

5 Combined Ciphertext: b'\xd6)-\xeeT;\xc0b\xech\x8a\x0c\xcf\x96_\x15\xa4J\xeck~\x17\\\x14\x1f1r\xcf\x0b\x85\x9a\xa7\x96\xea\x16\x0f]&\xc5\x02\xf83\xe5\xac9\xfa\xea\xd4\xb8\x88\x8f\\\xb8\x16\x9d+K\xce0yzE\x06 \x9d^\xc6\x07=\xf8\xe7Y\x91\x82i\x8c\x11g\xd4\x18n\xf2\xdf8\r/\xd1X\x97\x19P\xc6\x05\x92\xc5>\xfb\xc7\x8e`\xa6\x84\xf9\x7f\xe5\x81n\xac\x9d0\x87RXV\xb4\xc6\x11\xb7\x8d\xadc\xfd\xa5\xde\xab\x02`\xcd\xd8G\xd7\x82\x83\xac\x00\x9d\xd6\xc2T\x85\xbc\xe2\xab\xd1\x15\xfe\xcaY)(\xe8\x9d\xbe\xc7\r\xdb\xbf\x1e\xaa\x85\xfcERn\x98\xe0\xbf\x1bg\xdb\xd4\xea2H\x9eD\xcf\x1b\xad\x80\x90\xee\xf2\xd9K@~\x8c\xe8\xa4\xdeE\xc1\xc1\xde\xac<\x9732\xe0\xf8B<y\x06\x9e$\xdc\x14C0\xb0\x8c\x95\x85\xd4hS\xb4J2P\x8aJ\x01\x18\xa5\xd4t`Zg\x84\nl\xf8=\t:[U\xac\xf2\xa0^7?0H\x9d\xf1\x01\xeb\x80\xee\xbd\xb3\x86\x81H\xc5\xc6t\x1aKq\x03\xf4\xcc\x8c\x8e\xc0\xb3\x11],\xe5[\xcb\xe2?\xde0\x0e\x0f\x8b\xab\x8e[\xb7\xc0\xe8rx\xfa\x80\xb7`\x93\x11\xdf\x8d\xb9+8\x97+\x85y\x9f\x90@\x1f\xf3\xd2\xcf\xbe\x921\xe1\xdb3\x0e\x03\xd6\x8c\x93e\xa6\xcc\xe1I\x99TO}Q\xa1\x88V\x8c\xcb\\ox\x9a\xc8\x92p\xca\x93\xa6/\xdb\x97\x8e\xcf\x92\xcb\xdf\xbdQ%\xc4T"\xdf5\x11\x91\xaa\x9f\xd5\x97\x82!\x18:A\xbb_.\x82\xa8\x00\xad\x19K\x1c\x8dM4Xm\xc8R\x9fG\xd9D\xba\x94\xc4\xa8\xfb\x1f}\x84@cn:\x12\x98\xfc\x91\xb9j\x1dW\x0f\xb3\xad\x99\x14\xb8dq*\x9d\x8b\x05G\xf6\xc3\xaf\x97eX%I\xc5\x81`\x16\xd0\x96\xab\xbd\xc2_\x05\xa9\xec\xef\x16\xe3\x07$\xc9\xd2w\t\xa6\xb4\xad\xcd15\x08Z!<$a\xe7\xeb\xe8\x1f\x9e5\xac\xae\xa5,\x8e+

```
5 a\x89I\xda\xaca\x1a\xa2`\xf7.?\x8c\xf8\x1c7\x0e\xcc\
  xb8y\xb6\xa9\xfe\'1Kp+\xb5FR\x91\xc58*\xcb\x1b\xd4f\
  xea\xa0\xfd\x8b\x1d\xad!I\x97(%2\x07\xe9\xaf:\xc7$\
  x15\xbb(\xc0{=\xf8\x9e\x0bl\x00\n\x99\x18\xbb\xd79\n1
  @\xfaR\xe5^\xb7\xb5k\xaa\xb3wl\x1e\x90G\xaac7\xb5\xd1
  \x16K\x02\xba\x04\xea~\np\x96\xf6\xa7\x19B\x80\xcbCL\
  x81\x87\xab6\xce7]p0\x15\x8f"(\xc9\x8e\x13\xe3\xf2N\
  xc5X\x1b\xf5\xd2%\xf0\x86\x06\\#v\x9aeY\x83Rd\n\x17\
  x9d\xa9\xe3F\xa0v\xc7bpJ\x97h\x00\xa6\x08\x82\xd3n\
  x9a\xfc\x80"<\x82^\xb29XV4\x950\xff\x99\xf7\xaa\xef
  ^|\xcb)\x1e\xf7\xa6\xd6\xac\xb7\xb3\x8f\x005\xe2R\xf4
  :\\\xba\x0b,\xb4=\xd8\xbd\xd6b\xf5\xe8\x95;d7\xf8\x12
  \xee&\xfc:\xe4\xfe8\x98{E\x8dq\xd5\xfb\x95\x04.\x95\
  x8e0&2\x84\xe4\xda1Uh\xb3\xc6\xea(Z\xd5l\xd9m\xf0\
  x9b7\xc1\xa1\xfc\xdc\x89\xfep\xc5\xa3\n\xd9\xdb\xec\
  xa5\xc9W\xb3ML\xf7\xca\xc0\x12\\\x9a\x97\xd6\x12\x02\
  x81!\xee\x1bw|Q6\xc8\x8b\x95\xab5\xd1\x91\x8ef\'2\x0e
  }\xf8\nA\xcc\xf6\xca\xc83\x02\xf3,|\x19\xc6\x0f\x15D
  -\xd2+\xd8$\xb1\xadAk\xe4b\r\xf46\xea\\DZ\xad\x01\xaf
  ~\xce\x11&n\x06r\x92\x0c\xcc~\xc7\xe0=+h6\xf6D\x8a\
  xff\xa5\xf3jDc\'hy\x1b&e.\x8a~|\x96i\xb9Ux{\xaf67X\
  xd6\xfes\x1d\xeb\xb2\x83\xdd\xfa\x0f\x8bF\x9f\xc22V8\
  xe8^J2\xc0\rFm\xa2\x15\xd6\xe5\xf5x\xd2\xa4\xa0=`\
  xafI\x0e\x01\xb5\x03\xfd\xcd\xe9\x87\xdc\xbf\xb4\xa0\
  xa3\x00j\xb6,\xe9jJ%\xb8Y\x8b<\xed\xdb\x98rA1\xa2\xe9
  \xe7#1\xe5\xa0\xebj\xbb\xe2\x1d\xf4\') \xfc\xaf\x93\
  x8b\x86\xe1g\xe1\xc9\xc9\xf7\x92\'G\xe4\x13\xa2\x84
  \\\xbf\xb9!\x92\xc3\x8eP\x1b\xf5\xf9\x9fWS\xf4\xcf\
  x0c\xb50\xf11J\x03\x03\xdf\x8e\xa9\xb4\x80\xd1\xe8d\
  x94\xb4;\xc0\x1c\xc5\xca;<\x10u\xdc\x10\xb8\x05 o\x0f
  \x05\xfc\xbe$W\xb0\x9b$\x18\xf7\x9b\xd1\xbc,\xc7\x1a\
  x00\x8e>HHY\xff\xdd\r/=N\xdf_\n\xd8\x06\xe5)\x87V\
  x99t\xd4\x81bc\x9c\xfclI2\xd2\xec\xa5w\xb30\x0e\x17:\
  x86\xd4\xda\xbd\xf2\x17[\xfct\xe7\xc3\t7c>JE\x99\x13\
  x9a,\xd4\xc0\xb2\xbb\xda\x8f\x04\r\x1f\xd8\xeb?<Qb\
  xc4P\xd8\x94c7\x0f}\x07\xec\xaa|\xb6\x7fx\t\xff:\x13G
  \xa7\x1f\xf1\xe7J,\xf5L\xbc\xfa\xceCg\xf1\x11\xe6\xa6
  \xe9\\\x0c5\x9b\xf6\xe8ZAv\xf5\x99\xb1\xdf\x83\xb2\
  xf9\xf9\x91\x84\x1c\xed\r\xe1R\xec\xdb\xf7\xbd\x92\
  xe4\xc17\xd5\xe739[3\xa1\xa1\x12|\xb5\xd1E&\xc3u\x98\
  x1c\xb1\xa6\x84\xf7\x0e"l\xea/\xdcMB0\xf3Y\xa2\xb4\
```

```
5 x9f\xb05\x9aEr\\\x82=\xf5\xd2\xcbm\x0b\x94R;1?\x11\
  xb5\x8f5\t\x90\xe5\xfe\xd5"i\x8aH\xad\x97dN\xefU&\xf5
  \xa8oX\xbed\x01\x19\x129\xab\xf1ac\xd8\xe1\xd2\xe2E\
  x19LE-\n\xb2\x7f\xc2\xdebv\x19\x16\xdd\xa4\x0e$ 1dF\
  x1dJOx\x99\xec\xa7I8\x12\xd5UK\x87\xb5\x0e)\xac\x93.\
  xb3\xda$\x81\xb2\xac\xf0<TO,\xf8\xca\xfcN\x08\xebKV\
  x94f^\xaa\xff\xacuqs\x15\xd1L\x10\xe0\xe9\xfb\x17\x84
  \x11\x15\xa4\xec!\xca\xf8\xc0\xf2o7\xe4\xc3\xc1\x98G
  ;\x8d\xf0F.Q\xd5z1`\xfc\x00$.\xfd\x1do\t\xb4|\xd4o7\
  xd0\x9d\xf6\xc3\xb0\x17\xdfP\x03\xabMh\xa5+\xe9\xd8\
  xdd\x05\n\x1a\n{\'\xd4<G6K\x9b\xac\xa3\t\xc9\xae\x1d4
  \n\xf2\xaf\xa0*\xbbz\xb0\xda\x97\xeel\xf9\xb4\xbb\x84
  \xd8\xe1\xa1\xe8\x99i\xa0\xd4\xa5x\xd9e\xc9\x10\xe2\
  xb9\xacXpu\xe5\xe2p\xc3\xe9$k\xbc\x0c\xa1p\x7f\x89[\
  x87V/J>T?\x04\xcc\xbe=E\x07X_\x86\xd8\xc2\xaf\xf9\
  xcba\r&c\xc5eD\xcf\xdb4\x18\xfd}\x98\xf3\x83\xeb(\xa3
  \xf2\x1d\xf7Z(\xf8T\xe1\x90\x0e\xe4\xafc\xbc\x10\xf6\
  r\x81\x9dD\x9c\x1f4/\xd7\xc8\xaei\xc0\xc4\x92Q\xefH\
  x10Y\xeb\xea\x9cr\r\xdaab\x169]mtS\x8f\xf3wmF\x10A\
  xdc@\xfc- \xcb\xd0\xd1\xfc"\xc9~\xac\xcaf\xc2p\x8e\
  xa5\x87\x1a\xacs\xb0\xb4\x9f-\x1c\xe3%\xdd\xa3d\x82\
  xa5\xc4meP\xf3e\xe5X\xdb\xa4\xb3\xd4\x93J\xe0\xb0O\
  x83p\x04\x88`\xb5q2\x17Q8\xf7\x12\x83\xea\x15\x00iP\
  xef\xbe\x06\xc9\x81|\xa3\xccH\xa4d\x07\xa0\xff\xa0\
  xede\xc9\n\x0c\xac\xae~\xd7\xf5q\xfa\xd9\xdd\t\x01)1\
  xb4\xc0X\xff\xd4e\xd1\xe3\xf6!f\x0e2\x81\x8a\x04Z\
  xecD\x03"<A\xa7\x94\xae\xf9K \xbc\xcfb\xb2\x10\xf2![\
  xff\xf1\xdc9\xa1\x9a\x07;\xcc\x03\xcc6k\x7f\xb6l\x90k
  \x92\xefy\xeb\x9e\t\x93\r\x1f!\xee\xaf\xad98\x1b0!B\
  x0b\xaa\xb8\x8a{K8\xe4\xf8\xea;\x9a&\xd6\r\x00A\xe2\
  xc9L\xcf+\xa7\xbb.q\xa4V^z\xc4\xf1\x1c\x11\xe8g\xa9H
  }\xab\x82\xda&\x07(j\xb7|\xa8\x10\x96\x85\x8b\x85\x7f
  \x99\x82\xff\xb6\xd5\xb2W\x8f\xb2\n\xd5\x13-5\xef\xab
  \x94\x02\xdc\xad\x04\xb8\x01\xe5\x16L\xe4j\x98v\xb1\
  xabE\xe3\x07.\x1b\xdd=\xf5\x12E\x97\xf3\x0b\x93\x12\
  xf0\x02\'\xf88\xe2Mj\xae6)UhL4\x8c\xae\xbaY\xda\x8e\
  xe62\x10\x1d\xfa\xe5)\xc2\r\xd4\xd9\xb7\xcb\xa1\xfc\
  x9c\'x\xfc\x97\xfd"\xcc?\xefI\x91\xe4\xd4F\x80p\xbe\
  x8ch\x19\x1b\\\xaaT\xf0J\xaf\x80*\x01T\xc1\x13\x94\
  xd3:\x15\x03(\xffk\xf5\nJoD\xadeh\xebs\x0f\x1f\x1e\
  xb1\x8b\xac>\xa0\xd4cak\x00\xb0\xd5\xfb\x7f\\\xf7\x08
```

5 \xc4\xf3\xc6\xb5\xea\x98\x82?\xa2\x82\tr\xcbu\x06Z\x9a\xfd\x1dn!K\xa8\xcd\xe8\xad`\xea\x96\x7f\xa6U\xbe\xff\xff\x80\x95\xbb\xb0\xb7\xfbUv\x00\xc5\xfa\xb3}\xc8\x02\r\xee\xbeg+\xb3K\xf48)d\nU\xe5\x15\x05g\xac\r\x18\xfa\xdc\xa7\xe3\x9cZi5\x0cE\x17}uf\xa6\xb98a\xac\xbe\xb3\xac\xefm45\xd5\x9c\xe1\xf3\xfa\x8du\x98\xcb\t\xd04\xe2\x96\xd3\x95\x90`.\x1f2I\x93\x96\xbe\x08\x9a`Q\xc5\xf9\xfb\x14\xa4\x9d\xabZ\xfa\xd0Vs$/=U!|\x90n\xd3\x93APE5,\xa2\x9b\xc4\xf5\x1c\x8cc\xb2\xb5\xcag\xa6\x0bs\xedw\xef\x97T-\x1e\x96m*\xe4L8Z\xa0\x08B\xd8&pi\x06\x15\xb3\x1b B\xeb\xfc\tz\xdd\x8e\xdat\x1c\xaa\x1de\xc8\xaa\x82U\x96\\\xb1\x06c\xbcnt\xdc\x9b\xb7\xd4AE]\xd9\xcd\x851\xa0\xb2Lk>uTD\x8d\xf9>\xff:Q\t\xa0r\x82\x9f\xfd\xbcb\x91\xc4\xa9\x8ek\xe1\x88t\xb6\xfe%\xe5\x8e\xe2Yq!\x00\xfb\x0f\xe7\x04\xef\xfb|\x8cl\x89jT\xd7\x7f[\xf2\x0e\x03\x99l\x0b\xeaC\xeb\x8e[\x0e\xa9\xd0\xc9"+\xb9$0\x9c\xe6\x8fG$5\x17;UoQ5\t\x91\xe1\x82K\xbc#\xe5\xd5\xaf,\xa2\xe3&\x84?lr\x18\xd5e\x85\xeb\x11Sd"\\\xf5\xe6*\r&\x8a\x18\xac\xcf75:I\x85E\x00\xf0\x91b\xc5\x9f\xe7\x9b\xe3j\xfd\x95f\x8d"\x13?"t\xfc\xe6\xbd\xc32Uf\x94@7\xe5\xbc\x03C\xb19+\xf64R|\xfd}E\x92\xe4\x98A`\x8c\xc8\xf9\xd2s\x86\xff\xecyB\x1c\x815\xc0\xa0:=\xb2\xad\xce$7\xb9\xa4& \xcc:\x99\xcbo\x02\xf4\x95\xd9\xfa\xdf\x05\xc0\xc0\xddw\x04i\x9a\xf5\x87\xf4\xc9\xe6\xc7\xaa\xe0o\xdf\x8a\x10\xd4\x90\xc5\xa0\x08\xea\x95\x1f\xe4#\x99?\xf5\xa7Fu\xc81{\xd4\x0c1\x8e\x9f\x16k\x84\x90\x11zC(W"\xd8F\x02_O\x13\xfbg\x05X\xbaP\xa9\xce \x8df\xad\xe5G\x99\xb0\x1a\xc6\xa3\xb4\xae\x8c\x17\xd7\xe9Y\xd2\xe0\x13\xdb\xeatX\xda\xcb\xf4\\\x07\xdc\x84\x80\x07\x04\x04\xa0\x95\xb9-Pa0\xfc\x90\x81#\x9aK\xe4K\xe6\x85\x05[\r{v\x9b\xad'

6 ⬜ RSA Decryption Complete. Decrypted AES Key: b'2f1a3a11c1f3b525be2378dab2f9651b'

7 ⬜ AES Decryption Complete. Decrypted Message: b"Subject: Progress Update and Request for Further Guidance\r\n\r\nDear [Guide's Name],\r\n\r\nI hope this email finds you well. I wanted to provide you with an update on the progress of our project and discuss the next steps.\r\n\r\nProgress Update:\r\n\r\nOver the past [time period], I have been diligently

7   working on attaining the ecryption and decryption using the most feasible approach of having both the operations handled by two different files. \r\n\r\nI have encountered some challenges along the way, particularly in having them synchronized, but have successfully overcome them consolidating them like earlier but with an tricky way to handle the keys.\r\nIn my previous approach the system was generating the keys and auto-injesting them everytime the program is run which is totally absurd from cryptography ethics pov. Now that I\xe2\x80\x99ve corrected what exactly was the oversight, its fixed and the progress is in https://github.com/lateefcode2101/Crypto-Fusion \r\n\r\nPlease find the below \r\nNext Steps:\r\n\r\nAs we move forward, I am planning to focus on [outline your upcoming tasks or goals]. This involves [briefly describe the tasks and their objectives]. I believe completing these tasks will contribute significantly to the overall success of the project.\r\n\r\nRequest for Guidance:\r\n\r\nWhile making progress, I've come across [specific issues or questions you need guidance on]. I would greatly appreciate your insights and suggestions to overcome these challenges.\r\n\r\nAdditionally, I am interested in discussing the overall project direction and any adjustments you might recommend. Your guidance has been invaluable, and I am eager to ensure that the project aligns with your expectations.\r\n\r\nAvailability:\r\n\r\nI am available for a meeting at your earliest convenience to discuss the project in more detail. Please let me know a time that works for you, or if you prefer, we can communicate via email or another preferred method.\r\n\r\nThank you:\r\n\r\nThank you for your ongoing support and guidance throughout this project. I am committed to delivering the best possible results and value your expertise in steering the project in the right direction.\r\n\r\nLooking forward to hearing from you soon.\r\n\r\nBest regards,\r\n\r\n[Your Full Name]\r\n[Your University ID or Department]\r\n[Your Contact Information]\r\n"

```
 8 ▯ Decryption complete.
 9
10 Process finished with exit code 0
11
```