```
class Email{
// Implement Email Class according to the specifiaction.
 Header header;
 String body;
 String greetings;
 Email(Header header, String body, String greetings){
  this.header = header;
  this.body = body;
  this.greetings = greetings;
 }



}
class Header{
// Implemet the Header Class according to the specifiaction.
 String from;
 String to;
 Header(String from, String to){
  this.from = from;
  this.to = to;

 }

}


class EmailOperations{
// Implemet the Three methods specified in the specified.
 public int emailVerify(Email e){

  Pattern pattern = Pattern.compile("^[A-Za-z_][A-Za-z0-9._]+@[A-Za-z][A-Za-z0-9._]+\\.[A-Za-z]+$");
  Matcher m1 = pattern.matcher(e.header.from);
  Matcher m2 = pattern.matcher(e.header.to);
  if(m1.matches() && m2.matches()){
   return 2;
  }
  else if(m1.matches() || m2.matches()){
   return 1;

  }
  return 0;

 }

 public String bodyEncryption(Email e){
  /*if(e.body == null){
   return null;
  } */
  StringBuffer result= new StringBuffer();
  for (int i=0, len = e.body.length(); i<len; i++)
        {
   if(e.body.charAt(i) == ' '){
    result.append(' ');
    continue;
```

```
  }

        if (Character.isUpperCase(e.body.charAt(i)))
        {
           char ch = (char)(((int)e.body.charAt(i) + 3 - 65) % 26 + 65);
           result.append(ch);
        }
        else
        {
           char ch = (char)(((int)e.body.charAt(i) + 3 - 97) % 26 + 97);
           result.append(ch);
        }


      }
 return result.toString();
}


 public String greetingMessage(Email e){
  String name ="";
  if(e.greetings != null && e.header.from != null){
    name = e.header.from.substring(0,e.header.from.indexOf("@"));
    return e.greetings+ " "+ name;

  }

  return "";
 }



}


public class Source {
 public static void main(String args[] ) throws Exception {
  /* Enter your code here. Read input from STDIN. Print output to STDOUT */
    // You can Implement your main() to check your Program.
}
```