```java
import java.util.Scanner;

class Email {

    private String email;

    public Email(String email){
        this.email = email;
    }

    public String getEmail(){
        return email;
    }
}

interface Classify {

  void setNext(Classify nextChain);

  void categorize(Email email);
}

class DP implements Classify {

  private Classify chain;

  @Override
  public void setNext(Classify nextChain) {
    this.chain=nextChain;
  }

  @Override
  public void categorize(Email email) {

          int count = 0;
          String array[]={"design","patterns","subject","CST355-
4","singelton","object"};
          String str = email.getEmail();
          for(int i = 0; i < array.length ; i++)
          {
              if(str.contains(array[i]))
              {
                  count++;
              }
          }
```

```java
                    if(count >= 3)
                    {
                        System.out.println("Email as DP Email");
                    }
                    else
                    {
                        this.chain.categorize(email);
                    }

    }

}

class College implements Classify {

    private Classify chain;

    @Override
    public void setNext(Classify nextChain) {
        this.chain=nextChain;
    }

    @Override
    public void categorize(Email email) {

            int count = 0;
            String
array[]={"exam","result","subject","marks","grades","fees","practical","theory"};
            String str = email.getEmail();
            for(int i = 0; i < array.length ; i++)
            {
                if(str.contains(array[i]))
                {
                    count++;
                }
            }

            if(count >= 1 && str.contains("RCOEM"))
            {
                System.out.println("Email as College Email");
            }
            else
            {
                this.chain.categorize(email);
            }
```

```java
    }

}
class Friends implements Classify {

  private Classify chain;

  @Override
  public void setNext(Classify nextChain) {
    this.chain=nextChain;
  }

  @Override
  public void categorize(Email email) {

          int count = 0;
          String array[]={"friends","love","party","treat","group","no
study","enjoy","life","bhai","memes"};
          String str = email.getEmail();
          for(int i = 0; i < array.length ; i++)
          {
              if(str.contains(array[i]))
              {

                  count = count + 1;
              }
          }
          if(count >= 2)
          {
              System.out.println("Email as Friend's Email");
          }
          else
          {
              this.chain.categorize(email);
          }

  }

}
class Spam implements Classify {

  private Classify chain;

  @Override
```

```java
    public void setNext(Classify nextChain) {
      this.chain=nextChain;
    }

    @Override
    public void categorize(Email email) {

            int count = 0;
            String array[]={"buy","offer","lottery","21 din mein paisa
double","discount","best","sale"};
            String str = email.getEmail();
            for(int i = 0; i < array.length ; i++)
            {
                if(str.contains(array[i]))
                {
                    count++;
                }
            }

            if(count >= 2)
            {
                System.out.println("Email as Spam Email");
            }
            else
            {
                this.chain.categorize(email);
            }

    }

}
class Manual implements Classify {

    private Classify chain;

    @Override
    public void setNext(Classify nextChain) {
      this.chain=nextChain;
    }

    @Override
    public void categorize(Email email) {

            System.out.println("Email as Manual Email");
    }
```

```java
}

public class ChainOfResponsibilty {

    /**
     * @param args the command line arguments
     */
    private Classify c1;

    public ChainOfResponsibilty() {
    // initialize the chain
    this.c1 = new DP();
    Classify c2 = new College();
    Classify c3 = new Friends();
    Classify c4 = new Spam();
    Classify c5 = new Manual();

    // set the chain of responsibility
    c1.setNext(c2);
    c2.setNext(c3);
    c3.setNext(c4);
    c4.setNext(c5);
  }
    public static void main(String[] args) {
        ChainOfResponsibilty emailCategorizer = new ChainOfResponsibilty();
    while (true) {
      String email = "";
      System.out.println("Enter email: ");
      Scanner input = new Scanner(System.in);
      email = input.nextLine();

      // process the request
      emailCategorizer.c1.categorize(new Email(email));
    }

    }

}
```