```
1   //The order of APIs in source code does not provide useful information.
2   private MessageDigest getDigest(String algo){
3       //API sequence makes irrelevant APIs MessageDigest.getInstance(String)
4       //and Exception.getMessage() close to each other.
5       try{
6           return MessageDigest.getInstance(algo);
7       }catch (NoSuchAlgorithmException e){
8           throw new RuntimeException(e.getMessage());
9       }
10  }
11
12  public byte[] calculate_digest(int mode, String key) {
13      //Different control flow branches mix together
14      byte[] bytes = key.getBytes();
15      MessageDigest md = null;
16      if mode==0:
17          //Line 6 in the getDigest(algo) is invisible
18          md = getDigest("MD5");//Insecure
19      else:
20          md = getDigest("SHA-256")//Secure
21      return md.digest(bytes);
22  }
```

Figure 1: The source code for Figure 1 in our paper