**Usage of CheckSum Utility:**

****Please remove .txt from **pg-checksum-1.0-jar-with-dependencies.jar.txt** from file.

         Add jar file “**pg-checksum-1.0-jar-with-dependencies.jar**” as a “Reference” in your project.

          Now Generate CheckSum API as well as Verify CheckSum API are available as follows:

String checkSumServiceHelper.genrateCheckSumGAE(String merchantKey,TreeMap reqMap);

boolean checkSumServiceHelper.verifycheckSumGAE (String merchantkey, TreeMap responseTreeMap, String responseChecksum);

         For Generating CheckSum, use following snippet code:

com.paytm.merchant.CheckSumServiceHelper checkSumServiceHelper = com.paytm.merchant.CheckSumServiceHelper.getCheckSumServiceHelper();  
  
TreeMap<String,String> parameters = new TreeMap<String,String>();  
String merchantKey = "xxxxxxxxxxxxxxxxx"; //Key provided by Paytm

parameters.put("MID", "xxxxxxxxxxxxxxxxxxxxxx"); // Merchant ID (MID) provided by Paytm  
parameters.put("ORDER\_ID", "nnnnnnnnn"); // Merchant’s order id  
parameters.put("CUST\_ID", "CUST001"); // Customer ID registered with merchant  
parameters.put("TXN\_AMOUNT", "1");  
parameters.put("CHANNEL\_ID", "WEB");  
parameters.put("INDUSTRY\_TYPE\_ID", "Retail"); //Provided by Paytm  
parameters.put("WEBSITE", "xxxxxxxxxxx"); //Provided by Paytm

**//Note: Above mentioned parameters are not complete list of parameters. Please refer integration document for additional parameters which need to be passed.**

String checkSum = checkSumServiceHelper.genrateCheckSumGAE(merchantKey, parameters);

         For Verifying CheckSum, use following snippet code

com.paytm.merchant.CheckSumServiceHelper checkSumServiceHelper = com.paytm.merchant.CheckSumServiceHelper.getCheckSumServiceHelper();  
  
TreeMap<String,String> parameters = new TreeMap<String,String>();  
String paytmChecksum = "xxxxxxxxxxxx"; // Sent by Paytm pg  
boolean isValidChecksum = false;  
  
paytmChecksum = request.getParameter("CHECKSUMHASH");  
  
String merchantKey = "xxxxxxxxxxxxxxxxx"; //Key provided by Paytm

parameters.put("MID", "xxxxxxxxxxxxxxxxxxxxxx"); // Merchant ID (MID) sent by Paytm pg  
parameters.put("TXNID", ""); // Transaction id sent by Paytm pg  
parameters.put("ORDER\_ID", "nnnnnnnnn"); // Merchant’s order id  
parameters.put("BANKTXNID", "xxxxxxxxxxxx"); // Bank TXN id sent by Paytm pg  
parameters.put("TXN\_AMOUNT", "1");  
parameters.put("STATUS", " TXN\_FAILURE"); //sent by Paytm pg  
parameters.put("RESPCODE", "xxxxxxxxxxx"); //sent by Paytm pg

**//Note: Above mentioned parameters are not complete list of parameters. Please refer integration document for additional parameters which need to be passed.**

isValidChecksum = checkSumServiceHelper.verifycheckSumGAE (merchantkey, parameters, paytmChecksum);