**Usage of CheckSum Utility:**

         kindly include below packages.

1. use POSIX qw(strftime);
2. use Paytm::PaytmConstants;
3. use Paytm::PaytmEncDec;

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

**Subroutine to generate checksum:**

sub getChecksumFromArray { }

**Subroutine to verify checksum:**

sub verifychecksum\_e{ }

         For Generating CheckSum, use following snippet code:

my $key =Paytm::PaytmConstants::MERCHANT\_KEY;

my %post\_variables = (

"MID" => Paytm::PaytmConstants::MERCHANT\_ID,

"ORDER\_ID" => 1234,

"CUST\_ID" => 'ABCD123',

"TXN\_AMOUNT" => '10',

"CHANNEL\_ID" => Paytm::PaytmConstants::INDUSTRY\_TYPE\_ID,

"INDUSTRY\_TYPE\_ID" => Paytm::PaytmConstants::INDUSTRY\_TYPE\_ID,

"WEBSITE" => Paytm::PaytmConstants::WEBSITE

);

my $checksum=Paytm::PaytmEncDec::getChecksumFromArray($key,%post\_variables);

         For Verifying CheckSum, use following snippet code

my($buffer,@pairs,%post\_data);

$ENV{'REQUEST\_METHOD'} =~ tr/a-z/A-Z/;

if ($ENV{'REQUEST\_METHOD'} eq "POST"){

read(STDIN, $buffer, $ENV{'CONTENT\_LENGTH'});

}

@pairs = split(/&/,$buffer);

foreach $pair (@pairs){

($name, $value) = split(/=/, $pair);

$value =~ tr/+/ /;

$value =~ s/%(..)/pack("C", hex($1))/eg;

$post\_data{$name} = $value;

}

$checksumrec = $post\_data{'CHECKSUMHASH'};

my $key =Paytm::PaytmConstants::MERCHANT\_KEY;

if(Paytm::PaytmEncDec::verifychecksum\_e($key,$checksumrec,%post\_data)){

print "<h2>Match</h2>";

}else{

print "<h2>MisMatch</h2>";

}

**//Verify all parameters received from Paytm pg to your application. Like MID received from paytm pg is same as your application’s MID, TXN\_AMOUNT and ORDER\_ID are same as what was sent by you to Paytm PG for initiating transaction etc.**

$isValidChecksum = Paytm::PaytmEncDec::verifychecksum\_e($key,$checksumrec,%post\_data) // it will return 0 for checkmismatch and 1 for checksum match.