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public with sharing class MaintenanceRequestHelper {
  public static void updateworkOrders(List<Case> updWorkOrders, Map<Id,Case>
nonUpdCaseMap) {
    Set<Id> validIds = new Set<Id>();
    For (Case c : updWorkOrders){
      if (nonUpdCaseMap.get(c.ld).Status != 'Closed' && c.Status == 'Closed'){
         if (c.Type == 'Repair' || c.Type == 'Routine Maintenance'){
           validIds.add(c.Id);
        }
      }
    }
    if (!validIds.isEmpty()){
      List<Case> newCases = new List<Case>();
      Map<ld,Case> closedCasesM = new Map<ld,Case>([SELECT Id, Vehicle c,
Equipment c, Equipment r.Maintenance Cycle c,(SELECT Id, Equipment c, Quantity c
FROM Equipment Maintenance Items r)
                                 FROM Case WHERE Id IN :validIds]);
      Map<Id,Decimal> maintenanceCycles = new Map<ID,Decimal>();
      AggregateResult[] results = [SELECT Maintenance Request c,
MIN(Equipment r.Maintenance Cycle c)cycle FROM Equipment Maintenance Item c WHERE
Maintenance Request c IN: ValidIds GROUP BY Maintenance Request c];
    for (AggregateResult ar : results){
      maintenanceCycles.put((Id) ar.get('Maintenance Request c'), (Decimal) ar.get('cycle'));
    }
      for(Case cc : closedCasesM.values()){
         Case nc = new Case (
           Parentld = cc.ld,
         Status = 'New'.
           Subject = 'Routine Maintenance',
           Type = 'Routine Maintenance',
           Vehicle c = cc.Vehicle__c,
           Equipment c =cc.Equipment c,
           Origin = 'Web',
           Date_Reported__c = Date.Today()
         );
         If (maintenanceCycles.containskey(cc.ld)){
           nc.Date Due c = Date.today().addDays((Integer) maintenanceCycles.get(cc.ld));
         }
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newCases.add(nc);
       }
      insert newCases;
      List<Equipment_Maintenance_Item__c> clonedWPs = new
List<Equipment_Maintenance_Item__c>();
      for (Case nc : newCases){
         for (Equipment_Maintenance_Item__c wp :
closedCasesM.get(nc.ParentId).Equipment_Maintenance_Items__r){
           Equipment_Maintenance_Item__c wpClone = wp.clone();
           wpClone.Maintenance_Request__c = nc.ld;
           ClonedWPs.add(wpClone);
         }
       }
       insert ClonedWPs;
    }
  }
}
```