//query (i)

db.posts2.aggregate([

{$match:{"Score":{$gte:30}}},

{$lookup:{

from:"votes1",

localField:"answer.Id",

foreignField:"PostId",

as:"votes"}

},

{$unwind:"$votes"},

{$match:{"votes.VoteTypeId":2}},

{$unwind:"$answer"},

{$project:{\_id:0,question\_id:"$Id",acceptedanswer\_id:"$answer.Id",score:"$answer.Score",

time\_difference:{$subtract:["$votes.CreationTime","$decision\_day"]}}},

{$match:{"time\_difference":{$gt:0}}},

{$group:{\_id:{question\_id:"$question\_id",answer\_id:"$acceptedanswer\_id",score:"$score"},num:{$sum:1}}},

{$match:{"\_id.score":{$gt:0}}},

{$project:{\_id:1, percentage:{$divide:["$num","$\_id.score"]}}},

{$sort:{percentage:-1}},

{$limit:1}

])

//query (ii)

db.posts2.aggregate([

{$match:{"Score":{$gte:30}}},

{$lookup:{

from:"posts1",

localField:"Id",

foreignField:"ParentId",

as:"answer"}

},

{$lookup:{

from:"votes1",

localField:"answer.Id",

foreignField:"PostId",

as:"votes"}

},

{$unwind:"$answer"},

{$unwind:"$votes"},

{$match:{"votes.VoteTypeId":2}},

{$project:{\_id:0,question\_id:"$Id",answer\_id:"$answer.Id",score:"$answer.Score",

time\_difference:{$subtract:["$votes.CreationTime","$decision\_day"]},

ifaccepted:{$subtract:["$AcceptedAnswerId","$answer.Id"]}}},

{$match:{"ifaccepted":{$ne:0}}},

{$match:{"time\_difference":{$gt:0}}},

{$group:{\_id:{question\_id:"$question\_id",answer\_id:"$answer\_id",score:"$score"},num:{$sum:0.055}}},

{$group:{\_id:{question\_id:"$\_id.question\_id",num:"$num"},score\_total:{$sum:"$\_id.score"}}},

{$project:{\_id:"$\_id.question\_id",percentage:{$divide:["$\_id.num","$score\_total"]}}},

{$sort:{percentage:-1}},

{$limit:1}

])