|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| # | query | rows | cost | Pag.reads | Time(ms) | Index used | Index op |
| 1 | select \* from Production.WorkOrder | 72591 | .484 | 531 | 712 | WorkOrderID | Clustered index scan |
| 2 | select \* from Production.WorkOrder where WorkOrderID=1234 | 1 | .0033 | 216 | 26 | WorkOrderID | Clustered index seek |
| 3 | SELECT \* FROM Production.WorkOrder WHERE WorkOrderID between 10000 and 10010 | 11,99 | .0033 | 216 | 24 | WorkOrderID | Clustered index seek(sta) |
| SELECT \* FROM Production.WorkOrder WHERE WorkOrderID between 1 and 72591 | 72591 | .484 | 746 | 602 | WorkOrderID | Clustered index seek(all) |
| 4 | SELECT \* FROM Production.WorkOrder WHERE StartDate = '2007-06-25' | 57 | .519 | 1890 | 95 | WorkOrderID | Clustered indes scan |
| 5 | SELECT \* FROM Production.WorkOrder WHERE ProductID = 757 | 11,4 | .037 | 66 | 13 | ProductID | Nonclustered index seek |
| 6 | SELECT WorkOrderID, StartDate FROM Production.WorkOrder WHERE ProductID = 757 | 11,4 | .0033 | 236 | 22 | ProductID Covered(StartDate) | Nonclustered index seek |
| SELECT WorkOrderID, StartDate FROM Production.WorkOrder WHERE ProductID = 945 | 1105 | .006 | 242 | 95 | ProductID Covered(StartDate) | Nonclustered index seek |
| SELECT WorkOrderID FROM Production.WorkOrder WHERE ProductID = 945 AND StartDate = '2006-01-04' | 1,79 | .006 | 26 | 4 | ProductID Covered(StartDate) | Nonclustered index seek |
| 7 | SELECT WorkOrderID, StartDate FROM Production.WorkOrder WHERE ProductID = 945 AND StartDate = '2006-01-04' | 1,79 | .006 | 58 | 8 | ProductID and StartDate | Nonclustered index seek |
| 8 | SELECT WorkOrderID, StartDate FROM Production.WorkOrd | 1,01 | .003 | 24 | 2 | Composite(ProductID,StartDate) | Nonclustered index seek |

**8.2**

**b)**

Miliseconds used: 576480

Total Fragmentation: 99,07%

Page Fullness: 68,47%

**c)**

fillfactor = 65

Miliseconds used: 544820

fillfactor = 80

Miliseconds used: 540363

fillfactor = 90

Miliseconds used: 503600

**d)**

Miliseconds used: 97180

**e)**

Miliseconds used:1146670

**8.3**

**i)**

CREATE UNIQUE CLUSTERED INDEX IxSsn ON employee (Ssn);

**ii)**

CREATE INDEX IxLnameFname ON employee (Lname, Fname);

**iii)**

CREATE INDEX IxDno ON employee (Dno);

**iv)**

CREATE CLUSTERED INDEX IxEssnPno ON works\_on (Essn, Pno);