efore Optimization

```
OutputOperator(21)

SortOperator(20)
TrimHitCount = 0
TrimOffset = 0
Reorder = True
SortFields = {Count descending}

SortOperator(9)
TrimHitCount = 0
TrimOffset = 0
Reorder = True
SortFields = {Score descending}
```

recordTypeDesc:=[[Pos=0, Name=Count, Type=Int64, NULLABLE]],sortedPrefix:=0,primaryKeys:=[]

```
GroupOperator(19)
GroupingFields = {DocumentType}
Sorted = False
Aggregators = {Count,Count(args=Null,filter=Null)}
```

recordTypeDesc:=[[Pos=0, Name=DocumentType, Type=String, NULLABLE],
[Pos=1, Name=DocumentName, Type=String, NULLABLE],
[Pos=2, Name=Score, Type=Double, NULLABLE]],sortedPrefix:=0,primaryKeys:=[]

```
MapOperator(8)
RetainInput = False
ParameterMap = {DocumentType,"Input0.Input1.DocumentType"},{DocumentName,"Input1.DocumentName"},{Score,"Input0.Inpu
```

recordTypeDesc:=[[Pos=0, Name=DocumentType, Type=String, NULLABLE],
[Pos=1, Name=DocumentName, Type=String, NULLABLE],
[Pos=2, Name=Score, Type=Double, NULLABLE]],sortedPrefix:=0,primaryKeys:=[]

```
MapOperator(18)
RetainInput = False
ParameterMap = {DocumentType,"Input0.Input1.DocumentType"},{DocumentName,"Input1.DocumentName"},{Score,"Input0.Inpu
```

```
HybridHashJoinOperator(7)
JoinKeys = {{DocumentId,DocumentId}}
Selectivity = 0,000125
```

```
HybridHashJoinOperator(17)
JoinKeys = {{DocumentId,DocumentId}}
Selectivity = 0,000125
```

```
HybridHashJoinOperator(5)
JoinKeys = {{DocumentId,DocumentId}}
Selectivity = 0,000125
```

```
HybridHashJoinOperator(15)
JoinKeys = {{DocumentId,DocumentId}}
Selectivity = 0,000125
```

recordTypeDesc:=[[Pos=0, Name=DocumentId, Type=Int64, NULLABLE],
[Pos=1, Name=Score, Type=Double, NULLABLE]],sortedPrefix:=0,primaryKeys:=[]

recordTypeDesc:=[[Pos=0, Name=DocumentId, Type=Int64, NULLABLE],
[Pos=1, Name=Score, Type=Double, NULLABLE]],sortedPrefix:=0,primaryKeys:=[]

```
MapOperator(3)
RetainInput = False
ParameterMap = {DocumentId,"DocumentId"},{Score,"(70 * Score + 30 * ProxScore ) / 100"}
```

```
MapOperator(13)
RetainInput = False
ParameterMap = {DocumentId,"DocumentId"},{Score,"(70 * Score + 30 * ProxScore ) / 100"}
```

recordTypeDesc:=[[Pos=0, Name=Score, Type=Double, NULLABLE],
[Pos=1, Name=ProxScore, Type=Double, NULLABLE]],sortedPrefix:=0,primaryKeys:=[]

recordTypeDesc:=[[Pos=0, Name=Score, Type=Double, NULLABLE],
[Pos=1, Name=ProxScore, Type=Double, NULLABLE]],sortedPrefix:=0,primaryKeys:=[]

```
ScoreOccurrencesOperator(2)
Scorers = {Score,SimpleTerms(stdPos=20,minPosScore=0.2,stdNormFreq=2)},{ProxScore,SimpleProximity(stdPos=3,rev
Combiner = Average(weights=Null)
GroupPrefix = 1
Required = -1
```

```
ScoreOccurrencesOperator(12)
Scorers = {Score,SimpleTerms(stdPos=20,minPosScore=0.2,stdNormFreq=2)},{ProxScore,SimpleProximity(stdPos=3,rev
Combiner = Average(weights=Null)
GroupPrefix = 1
Required = -1
```

```
LookupOperator(0)
Word = search
IndexName = Occurrence1
```

```
LookupOperator(1)
Word = engine
IndexName = Occurrence1
```

```
LookupOperator(4)
Word = DocumentType
IndexName = Occurrence2
```

```
LookupOperator(6)
Word = DocumentName
IndexName = Occurrence2
```

```
LookupOperator(10)
Word = search
IndexName = Occurrence1
```

```
LookupOperator(11)
Word = engine
IndexName = Occurrence1
```

```
LookupOperator(14)
Word = DocumentType
IndexName = Occurrence2
```

```
LookupOperator(16)
Word = DocumentName
IndexName = Occurrence2
```