**Problem 2:**

[training@localhost data]$ hadoop fs -cat result8/part-00000| head -50

james rice {'generation': 1, 'document': 1, 'virtual': 1, 'modelbased': 1}

eddie b. pruitte jr. {'using': 1, 'call': 1, 'centers': 1, 'simulation': 1}

kutluhan erol {'infrastructure': 1, 'decidability': 1, 'results': 1, 'undecidability': 1, 'complexity': 1, 'planning': 1, 'mass': 1, 'customization': 1, 'internet': 1, 'agents': 1, 'domainindependent': 1}

divesh srivastava {'representing': 1, 'primitive': 1, 'text': 1, 'integration': 1, 'pix': 1, 'trading': 1, 'query': 1, 'phrase': 1, 'integrity': 1, 'matching': 2, 'xml': 2, 'information': 1, 'rdbms': 1, 'space': 2, 'efficient': 1, 'exact': 1, 'warehouses': 1, 'approximate': 1, 'cleansing': 1, 'complex': 1, 'maintenance': 1, 'pattern': 2, 'hierarchies': 1, 'evaluation': 1, 'database': 1, 'checking': 1, 'logic': 1, 'objects': 1, 'joins': 2, 'relaxation': 1, 'data': 2, 'structural': 1, 'deductive': 1, 'querying': 1, 'constraint': 2, 'materialized': 1, 'coral': 1, 'programs': 1, 'tree': 1, 'optimization': 1, 'can': 1, 'time': 1, 'bottomup': 1, 'system': 1, 'view': 1}

luiz m. g. gonçalves {'towards': 1, 'morphing': 1, 'differentiability': 1, 'preserving': 1, 'contour': 1, 'multimodal': 1, 'stereognosis': 1}

sanya mitaim {'fuzzy': 1, 'search': 1, 'neural': 1, 'agents': 1, 'database': 1}

andrew j. palay {'search': 1, 'vlsi': 1, 'generator': 1, 'implementation': 1, 'move': 1, 'tree': 1, 'results': 1, 'bsupsup': 1, 'design': 1, 'chess': 1, 'new': 1, 'algorithm': 1}

karen j. murray {'development': 1, 'retrospective': 1, 'expert': 1, 'system': 1, 'five': 1, 'systems': 1, 'view': 1}

yasuhiro sugimoto {'20mhz': 1, '10bit': 1, 'currentmode': 1, 'sample': 1, 'circuit': 1, '16v': 1, 'hold': 1}

susumu morito {'development': 1, 'system': 2, 'planning': 1, 'flexible': 1, 'simulationbased': 1, 'manufacturing': 1}

harry j. p. timmermans {'viewbased': 1, 'planning': 1, 'design': 1, 'dss': 1, 'location': 1}

c. w. ahn {'arrival': 1, 'queues': 1, 'vacations': 1, 'time': 1, 'approach': 1, 'mg1type': 1, 'generalized': 1}

shingo uchihashi {'exploring': 1, 'book': 1, 'video': 1, 'comic': 1, 'presentation': 1, 'interactive': 1}

t. todd elvins {'visualization': 1, 'networkbased': 1, 'controlled': 1, 'scientific': 1, 'system': 1, 'volume': 1, 'digital': 1, 'netv': 1, 'data': 1, 'experimental': 1, 'publication': 1}

simon m. kaplan {'development': 1, 'concurrent': 1, 'handling': 1, 'applying': 1, 'primarybackup': 1, 'space': 1, 'process': 1, 'graph': 1, 'twosafe': 1, 'specifying': 1, 'engineering': 1, 'grammars': 2, 'languages': 1, 'failure': 1, 'optimized': 1, 'systems': 2, 'amp': 1, 'approach': 1, 'suppport': 1, 'maintaining': 1, 'software': 2}

frances deepwell {'horse': 1, 'lead': 1, 'coventry': 1, 'university': 1, 'can': 1, 'learning': 1, 'online': 1, 'towater': 1}

norbert e. fuchs {'executable': 1, 'english': 1, 'controlled': 1, 'ace': 1, 'programs': 1, 'specifications': 1, 'poster': 1, 'abstract': 1, 'bridgehead': 1, 'seemingly': 1, 'informal': 1, 'attempto': 1, 'logic': 2, 'hoare': 1, 'territory': 1, 'formal': 1}

jan maluszynski {'towards': 1, 'based': 1, 'language': 1, 'programming': 2, 'twolevel': 1, 'grammatical': 1, 'reduction': 1, 'goals': 1, 'logic': 1, 'grammar': 1, 'bottomup': 1, 'notion': 1, 'recognition': 1, 'view': 1}

rainer schrader {'approaches': 1, 'algorithmic': 1, 'setup': 1, 'minimization': 1}

yongchun kim {'calmriscsuptmsupbased': 1, 'cache': 1, 'design': 1, 'systems': 1, 'lowpower': 1}

hyuk-jang park {'model': 1, 'efficient': 1, 'flows': 1, 'detection': 1, 'modeling': 1, 'privilege': 1, 'using': 1, 'markov': 1, 'anomaly': 1, 'hidden': 1}

stephen j. boies {'distance': 1, '1984': 1, 'olympic': 1, 'wwwaware': 1, 'multiagent': 1, 'system': 2, 'principles': 1, 'design': 1, 'behavioral': 1, 'test': 1, 'message': 1, 'approach': 1, 'smart': 1}

ennio cascetta {'art': 1, 'modelling': 1, 'state': 1, 'future': 1, 'transportation': 1, 'dynamics': 1, 'networks': 1, 'developments': 1}

r. ranawana {'use': 1, 'description': 1, 'recognize': 1, 'feature': 1, 'alphanumeric': 1, 'characters': 1, 'fuzzy': 1, 'handwritten': 1}

robert l. kelsey {'representation': 1, 'methodology': 1, 'objectbased': 1, 'knowledge': 1, 'sgml': 1}

clinton l. jeffery {'visualization': 1, 'optimization': 1, 'programs': 1, 'nova': 1, 'dataparallel': 1}

darrell d. e. long {'control': 1, 'dynamic': 1, 'opportunistic': 1, 'system': 1, 'reliability': 1, 'replica': 1, 'optimistic': 1, 'file': 1, 'replicated': 1, 'quorumoriented': 1, 'renewal': 1, 'distributed': 2, 'inplace': 1, 'availability': 1, 'estimating': 1, 'version': 1, 'systems': 1, 'reconstruction': 1, 'evaluation': 1, 'lease': 1, 'files': 1, 'raid': 1, 'swiftraid': 1, 'differences': 1, 'replication': 1, 'improving': 1, 'regenerationbased': 1, 'data': 1, 'protocols': 2, 'database': 1, 'study': 1, 'simulation': 1, 'realistic': 1, 'multicast': 1, 'editorial': 1, 'analytical': 1, 'voting': 1}

timothy d. korson {'case': 1, 'building': 1, 'java': 1, 'study': 1, 'architecture': 1, 'uml': 1, '3tier': 1}

r. weigel {'sawbased': 1, 'indoor': 1, 'system': 1, 'applications': 1, 'robust': 1, 'chirppi4': 1, 'dqpsk': 1}

n. j. hall {'cointegration': 1, 'within': 1, 'interconnections': 1, 'silicon': 1, 'optical': 1, 'systems': 1, 'toward': 1, 'microelectronic': 1}

peter molin {'design': 1, 'software': 1, 'evaluation': 1, 'transformation': 1, 'architecture': 1}

helmut e. graeb {'circuits': 1, 'analysis': 1, 'tradeoff': 1, 'normalboundary': 1, 'performance': 1, 'intersection': 1, 'analog': 1}

robert l. leitheiser {'workers': 1, 'computer': 1, 'knowledge': 1, 'support': 1, 'experiments': 1, 'laboratory': 1, 'review': 1}

kwok-wai cheung {'deformable': 1, 'transform': 1, 'filters': 1, 'networks': 1, 'issues': 1, 'network': 1, 'extraction': 1, 'twodimensional': 1, 'character': 1, 'system': 1, 'multiwavelet': 1, 'signals': 1, 'application': 1, 'narrowband': 1, 'handwritten': 1, 'acoustooptic': 1, 'applications': 1, 'preprocessing': 1, 'bidirectional': 1, 'matching': 1, 'wdm': 1, 'tunable': 1, 'discrete': 1}

yaozong liu {'web': 1, 'validation': 1, 'wrapper': 1}

sibylle gruber {'contexts': 1, 'discourse': 1, 'multiple': 1, 'collaborative': 1, 'writing': 1}

heinrich rust {'development': 1, 'based': 1, 'feedback': 1, 'measurement': 1, 'loops': 1, 'automata': 1, 'analyzing': 1, 'concepts': 1, 'timed': 1, 'model': 1, 'cottbus': 1, 'projects': 1, 'software': 1}

kwan woo ryu {'model': 1, 'distributed': 1, 'block': 1, 'memory': 1}

antoine requet {'specifications': 1, 'translator': 1, 'adaptable': 1, 'embedded': 1, 'programs': 1}

ramon capillas {'neurocomputer': 1, 'reconfigurable': 1, 'massively': 1, 'arithmetical': 1, 'parallel': 1, 'unit': 1}

steven tuecke {'multiinstitutional': 1, 'management': 1, 'infrastructure': 1, 'grids': 1, 'condorg': 1, 'agent': 1, 'metacomputing': 1, 'experiment': 1, 'computation': 1, 'iway': 1, 'software': 1}

stefan s. dantchev {'tree': 1, 'weak': 1, 'pigeonhole': 1, 'principle': 1, 'proofs': 1, 'resolution': 1}

zhen yao {'web': 1, 'search': 1, 'semantic': 1, 'section': 1, 'performance': 1, 'relation': 1, 'using': 1, 'enhance': 1, 'structures': 1}

armand prieditis {'heuristics': 3, 'generating': 1, 'abstraction': 1, 'abstracting': 1, 'effective': 2, 'optimizing': 1, 'search': 1, 'reconstitution': 1, 'admissible': 3, 'machine': 1, 'discovering': 1, 'discovery': 1}

deepak bapna {'pointing': 1, 'antenna': 1, 'mobile': 1, 'robots': 1, 'high': 1, 'communications': 1, 'bandwidth': 1}

pramod ramarao {'prevent': 1, 'exploits': 1, 'buffer': 1, 'detection': 1, 'support': 1, 'access': 1, 'memory': 1, 'overflow': 1, 'runtime': 1, 'violations': 1}

james d. johannes {'visualization': 1, 'algorithm': 1, 'expert': 1, 'animation': 1, 'systems': 1, 'applicability': 1, 'reasoning': 1, 'techniques': 1}

geoffrey edwards {'sciences': 1, 'humanities': 1, 'support': 1, 'voronoi': 1, 'space': 1, 'bed': 1, 'applications': 1, 'cultural': 1, 'virtual': 1, 'social': 1, 'test': 1, 'cognitivelyaware': 1, 'technologies': 1, 'model': 1, 'geomatics': 1}

hubertus hohl {'zur': 1, 'hypadapter': 1, 'pr\xc3\xa4sentation': 1, 'von': 1, 'adaptives': 1, 'hypertextsystem': 1, 'lerninhalten': 1, 'ein': 1}

lars birkedal {'handwriting': 1, 'program': 1, 'generators': 1, 'generator': 1}