

File : extract\_graph\_from\_lattice

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C:/Users/AMIT/AppData/Local/Programs/Python/Python37/python.exe "C:/Users/AMIT/Documents/Python Scripts/project/extract_graph_from_lattice.py"
() -> ('big data i/o performance', 'quality assessment', 'psychology', 'statistic information', 'esda', 'prosthetics', 'high performance computing infrastructures', 'biomedical education', 'ports (computers)', 'modified total sharp score', 'iq', 'cloud computing', 'open-loop structure')
('student1',) -> ('correctness', 'high fidelity inference capability', 'convolution', 'intelligent control', 'effectiveness', 'production rjms middleware car', 'cluster classification', 'deep clustering network', 'noise measurement', 'mapreduce', 'feedback', 'pattern discovery')
('student2',) -> ('hpc idle resources', 'image sampling', 'ix', 'neural network hardware', 'classification tree analysis', 'fuzzy neural network', 'decision tree induction algorithms id3', 'lstm based model', 'big social data', 'adaptive learning', 'progression evaluation', 'fpna')
('student3',) -> ('numerical simulation', 'object detection', 'fuzzy logic', 'probabilistic', 'business data', 'power generation economics', 'multidimensional data set', 'resource estimation', 'job management system', 'stock markets')
('student4',) -> ('case study', 'adaptation models', 'deep q-learning', 'chaotic communication', 'live data massive streaming', 'pose estimation', 'hepatitis disease diagnosis', 'null value', 'machinable thoughts', 'datamining', 'memory', 'big data platform')
('student5',) -> ('g-learning loss value', 'online data', 'character recognition', 'semantic technologies', 'feature extraction and classification', 'data quality dimension', 'file systems', 'terrorism', 'duty cycle', 'lot', 'crossbreed genetic algorithm', 'data archive', 'fed')
('student6',) -> ('quality assessment', 'decoding', 'computational modeling', 'test pattern', 'context', 'information storage mechanism', 'boolean factor analysis', 'classification tree analysis', 'crowd sourcing geographic data today', 'energy consumption', 'big data quality')
('student7',) -> ('distributed platform', 'dynamic backward error assignment', 'training progress', 'function approximation capability', 'human arm movement patterns', 'big datasets', 'usaf', 'java', 'hand gesture recognition', 'large-scale systems', 'multiplying circuits', 'social media big data')
('student8',) -> ('graph-based unsupervised learning', 'stock market forecasting', 'object identification', 'concrete', 'unfiltered web page', 'discrete hopfield neural network', 'function approximation capability', 'myo armband', 'education', 'production engineer')
('student9',) -> ('statistic information', 'function approximation capability', 'probability', 'compensator', 'fast learning', 'hyperparameters optimization', 'noise measurement', 'computation energy distribution', 'deepert', 'cnn', 'open source machine learning', 'computer game')
('student10',) -> ('financial market', 'company', 'recognition rate', 'dia', 'ethic', 'output units', 'dispatching', 'system stability', 'multilayer neural networks')
('student11',) -> ('quality assessment', 'geospatial data point processing', 'resource description framework', 'kernel function', 'synapse circuits', 'online data', 'dgn', 'best effort', 'kera', 'recurrent neural nets', 'flash-based capacitor', 'recurrent neural networks', 'deep')
('student12',) -> ('hardware implementation', 'domain model', 'disc drives', 'test pattern', 'ix', 'flexible structures', 'fuzzy neural nets', 'open source framework', 'fuzzy logic', 'highly efficient deep learning inference mechanisms', 'dcmn', 'genetic programming', 'theoretical')
('student13',) -> ('cased based reasoning', 'fuzzy neural nets', 'social set analysis', 'highly accurate inference', 'outer product synaptic weight adjustments', 'solid state disk', 'dia', 'medical computing', 'parallel structure', 'machine learning in medicine', 'logic circuits')
('student14',) -> ('index', 'behavior acquisition', 'worst-case control', 'data engineering', 'data analytics process', 'three layer feedforward network', 'field programmable gate arrays', 'hadoop', 'open source machine learning', 'electronic neuromic model', 'decision tree', 'arithmetic')
('student15',) -> ('neuroboard', 'nike sales forecasting', 'digitally-controlled synapse', 'seal', 'business application', 'clustering algorithms', 'deep convolutional neural network', 'docker', 'hazard', 'active learning', 'least squares methods', 'customer relationship manager')
('student16',) -> ('concept algebra', 'fault tolerant computing', 'deep core learning', 'coordinated behaviors', 'chemical', 'human pose estimation', 'computer science', 'cognition', 'function approximation', 'big social data', 'unknown nonlinear plant', 'multimedia databases')
('student17',) -> ('copyright protection', 'embryo', 'sign recognition', 'differentiable equations', 'data mining algorithm', 'pulse modulation', 'neural objects', 'manufacturing systems', 'social network', 'hippocampal circuit')
('student18',) -> ('best practices', 'hierarchical deep learning models', 'standard', 'automatic control', 'deep reinforcement learning', 'knowledge engineering', 'differential equations', 'design engineering', 'workload balanced division', 'computer aided instruction', 'storage')
('student19',) -> ('fault tolerant computing', 'dynamic scheduling', 'medical diagnosis', 'dynamic', 'unsupervised feature learning', 'crossbreed genetic algorithm', 'storage cost', 'big data', 'wavelength division multiplexing', 'task learning acceleration', 'accident risk detection')
('student20',) -> ('decision support systems', 'text recognition', 'hypertension', 'principal component analysis', 'do issues', 'protein', 'computer-aided diagnosis', 'distributed mining', 'numerical analysis', 'optimization', 'owl', 'neurite networks', 'pattern matching', 'form')
('student21',) -> ('svm classifier inference', 'control logic circuit', 'social set analysis', 'government', 'open source framework', 'hand x-ray image', 'data analytics process', 'logistics', 'classification accuracy', 'fast learning', 'hpc and big data convergence', 'gennets')
('student22',) -> ('modified total sharp score', 'hpc workload', 'counter-terrorism', 'two-stage machine learning system', 'machine learning accuracy', 'diverse data sources', 'ordinary differential equation', 'control signal', 'job shop scheduling', 'educational courses', 'post')
('student23',) -> ('systems engineering and theory', 'high-dimensional real-world applications', 'big scientific data', 'analogue processing circuits', 'spatiotemporal data', 'scalable machine learning problems', 'deep autoencoders')
('student24',) -> ('arm archive', 'factor concepts', 'chinese web filtering', 'fatigue', 'radial basis function network structure', 'gas turbines', 'computer simulation', 'exploratory machine learning attack', 'mathematics', 'conference', 'data locality manager', 'neural chips')
('student25',) -> ('correctness', 'instrument', 'intelligent cooperative multiple agents', 'fitness function', 'learning algorithm', 'dot product matching neural network', 'optical computing', 'wavelet analysis', 'big scientific data', 'cognitive systems', 'deep learning algorithm')
('student26',) -> ('alzheimers disease classification', 'road', 'drug-drug interactions', 'middleware', 'restricted boltzman machine', 'arithmetic', 'hyperparameters', 'formal concept', 'big data application workflow', 'convolution structure', 'digital control', 'matched filters')
('student27',) -> ('open-loop structures', 'neuroboard', 'statistic', 'field programmable neural arrays', 'fpnn', 'sosevi', 'government', 'algorithm', 'engineering', 'classification incremental learning algorithm', 'functional link network', 'crowd sourcing geographic data today')
('student28',) -> ('major brain functions', 'company', 'function approximation capability', 'educational institutions', 'cellular automata', 'large-scale data intensive scientific application', 'data compression', 'exploratory spatial data analysis', 'big data collections', 'medical')
('student29',) -> ('numerical simulation', 'cross industry standard platform for data mining', 'upper bound', 'training set information', 'geospatial data point normalization', 'neural network models', 'recurrent neural networks', 'layered topology', 'uncertainty', 'two-character')
('student30',) -> ('dataset query', 'standard feedforward networks', 'ix', 'accuracy', 'big data search and mining', 'boolean factor analysis', 'game ai domain', 'inverse dynamics', 'video lecture', 'heart', 'open loop systems', 'scem')
('student31',) -> ('ix', 'cloud computing', 'ix', 'biological neural networks', 'finger joint detection', 'adaptive control', 'inference framework', 'classification incremental learning algorithm', 'metric space', 'deep convolutional neural network', 'continuous hopfield neural network')
('student32',) -> ('best practices', 'high fidelity inference capability', 'fault samples', 'dual codes', 'adaptation rule circuit', 'big data search and mining', 'distributed databases', 'fpga', 'information systems', 'fuzzy sets', 'ordinary least squares algorithm', 'learning')
('student33',) -> ('very large scale integration', 'iterated game executions', 'video analysis', 'job production systems', 'liver', 'groupware', 'supervised fast learning filter neural network', 'mean absolute percentage error')
('student34',) -> ('maximum probability', 'counter-terrorism field', 'object detection', 'server', 'clinical big data', 'machine learning techniques', 'generating control bits', 'deep representation learning')
('student35',) -> ('ports (computers)', 'arm archive', 'fpnn', 'pressure measurement', 'text analysis', 'flexible beam', 'circuit', 'recurrent neural nets', 'field programmable gate arrays', 'hand gesture recognition', 'safety', 'foot x-ray image', 'multi-layer neural network')
('student36',) -> ('classification accuracy', 'data locality', 'communication links', 'road accident', 'training', 'latent variable', 'social set visualizer', 'collaboration', 'web services', 'semantics algebra', 'biomedical monitoring', 'htn algorithm')
('student37',) -> ('cloud', 'sosevi', 'architecture', 'discrete hopfield neural network', 'protein', 'crowd sourcing geographic data today', 'fuzzy neural network', 'data locality', 'neural network hardware implementations', 'classifier training', 'patient datasets', 'ols algorithm')
('student38',) -> ('subject-based data archives', 'synapse circuits', 'production equipment', 'data mining', 'job production systems', 'big data application workflow', 'file systems', 'logic programming languages', 'comprehension quizzes', 'big data validation', 'input data pre')
('student39',) -> ('modified backpropagation learning', 'cognitive solution', 'hardware implementation', 'discrete wavelet transforms', 'instrument', 'data geographical distribution', 'intelligent data analysis', 'geographic location', 'machine learning method', 'risk management')
('student40',) -> ('biological cells', 'tex classification application', 'fault-tolerant', 'trajectory', 'indexing', 'target data', 'aida sales framework', 'computer', 'human arm movement patterns', 'push recovery learning', 'approximation algorithms', 'state estimation', 'representation')
('student41',) -> ('optical fiber theory', 'data distribution', 'io sensor device', 'accelerometer', 'data locality', 'rewarding system', 'production engineering computing', 'backpropagation neural network', 'shared goal', 'company data', 'deep know)
('student42',) -> ('fuzzy neural networks', 'counter-terrorism field', 'concrete', 'medical decision making', 'data space', 'charge domain characteristics', 'chinese new word extraction', 'feature extraction and classification', 'preoperative planning', 'loss measurement', 'ener)
('student43',) -> ('surveillance platform', 'robust deep models', 'commercial hotspots', 'electromyography', 'intelligent data analysis', 'real-time systems', 'taxonomy', 'decision making', 'semantics', 'frequency', 'asynchronous random neural networks', 'machine learning class')
('student44',) -> ('copyright protection', 'ix', 'cognitive systems', 'online analytical process', 'dot product matching neural network', 'distributed storage', 'semantic technologies', 'patient datasets', 'computer games', 'record processing', 'dynamical learning process', 'ix', 'de')
('student45',) -> ('network topology', 'python-based deep learning library', 'mapreduce', 'deep sarsa learning', 'energy states', 'business data processing', 'vibration control', 'market research', 'data management', 'basal ganglia')
('student46',) -> ('exploratory attacks', 'collaborative work', 'government', 'facebook data', 'synchronization', 'deep layers', 'fpga', 'cooperative behavior', 'cellular neural nets', 'unsupervised deep learning approach', 'output feedback', 'logic programming', 'moco')
('student47',) -> ('ix', 'chaos', 'engine', 'server', 'sensor', 'real', 'software prototyping', 'ix', 'economic indicators', 'decision trees', 'educational institutions', 'ix', 'optimization methods', 'adaptive learning', 'h/spl infin control', 'modern storage systems', 'ordinary le)
('student48',) -> ('concept algebra', 'artificial generalized intelligence', 'time factors', 'benes interconnection network', 'ocean', 'backpropagation learning', 'automatic control', 'ix', 'capacitors', 'record processing', 'learning (artificial intelligence)', 'auto-associative')
('student49',) -> ('resource description framework', 'time factors', 'sign recognition', 'graphics processing unit', 'iot device', 'energy consumption', 'highly efficient deep learning inference mechanisms', 'mapreduce', 'control signal', 'matrix decomposition', 'weibo check-in')
('student50',) -> ('rheumatoid arthritis', '2d compatible neural networks', 'concrete', 'network type', 'data quality', 'industry', 'machine intelligence', 'metadata management', 'open source machine learning', 'feedforward neural nets', 'mitre research team', 'adversarial machi)
('student51',) -> ('information management', 'statistical learning', 'returns to scale', 'image sampling', 'ontology', 'heterogeneous data sources', 'lstm based model', 'matched filters', 'baips', 'analytical models', 'ix', 'performance evaluation', 'network weights', 'data handling')
('student52',) -> ('big data i/o performance', 'rheumatoid arthritis', 'clean data', 'knee surgeries', 'automatic control', 'numerical analysis', 'multimedia databases', 'output units', 'ml', 'polynomial', 'high dimensional feature space')
('student53',) -> ('open-loop structures', 'text analysis', 'distributed storage', 'myo armband', 'multilayered perceptron neural network', 'rewarding system', 'wuc', 'performance evaluation', 'computational efficiency', 'arm data center', 'big data analysis')
('student54',) -> ('ports (computers)', 'facebook data analytics', 'ma', 'video analysis', 'crowd sourcing geographic data today', 'cctv cameras', 'hard disk drive', 'rule induction', 'doubles pond game', 'search methods', 'big data access', 'learning paradigm', 'foot x-ray imaged')
('student55',) -> ('psychology', 'maximum probability', 'collective effort', 'dynamic backward error assignment', 'main building blocks', 'nonlinear control systems', 'triangular maps', 'data mining', 'production', 'business application', 'decision making', 'cnn', 'softmax class')
('student56',) -> ('geospatial data point processing', 'dynamic backward error assignment', 'japan', 'time factors', 'space technology', 'human arm movement patterns', 'sequential decision making', 'big-data analyses', 'vegetation', 'limited interconnection scheme', 'speaker-indent')
('student57',) -> ('kernel function', 'classification algorithms', 'big data integration', 'biodiversity data', 'communication networks', 'middleware', 'cognition', 'algorithm', 'marketing data processing', 'deep kernel learning', 'next-gen tools', 'machine learning method', 'au)
('student58',) -> ('total knee arthroplasty', 'tka', 'deep core learning', 'human pose estimation', 'circuit', 'cognitive foundations', 'approximation algorithms', 'digital control', 'standard backpropagation', 'arthritis', 'hand gesture recognition', 'cluster mining')
('student59',) -> ('biomedical education', 'exploratory attacks', 'commercial hotspots', 'artificial neural netw (ann)', 'classification accuracy', 'cognitive robotics', 'hyper planes', 'feedforward neural nets', 'diagnosis system', 'multidimensional climate observations', 'ne)
('student60',) -> ('portfolio', 'subject-based data archives', 'seal', 'cross industry standard platform for data mining', 'arithmetic', 'streaming media', 'risk analysis', 'storm', 'flexible visualization-based user interface', 'generalisation (artificial intelligence)', 'inte)
('student61',) -> ('esda', 'deep architectures', 'optical fiber theory', 'switched-capacitor implementations', 'patient treatment', 'darwin machines', 'tellurium', 'social networks', 'ontologies (artificial intelligence)', 'protection', 'inter-cloud')
('student62',) -> ('best effort', 'hierarchical machine learning', 'ix', 'decision trees', 'imbalanced classes', 'biomedical monitoring', 'moco')
('student63',) -> ('code', 'major brain functions', 'atmospheric measurements', 'dqn model', 'svm classifier inference', 'read-write memory', 'analogue computer circuits', 'convolution', 'programmable nonlinear capacitor', 'social networking (online)', 'data quality dimension', 'ix', 'cloud computing', 'field programmable neural arrays', 'exploratory attacks', 'biomedical imaging', 'feedforward', 'platform independent machine learning library', 'triples (data structure)', 'neuroscience', 'user assessable data files', 'theoretical analy)
('student64',) -> ('portfolio', 'stock market forecasting', 'best effort', 'ix', 'intelligent networks', 'ix', 'x-ray imaging', 'crowd sourcing geographic data today', 'redundancy', 'calibrated data agglomerations', 'internet of things', 'big scientific data', 'deep convolutional belief)
('student65',) -> ('psychology', 'deep learning performance', 'boolean functions', 'jugonet', 'chaotic time series', 'machine learning techniques', 'ix', 'terrorism', 'hebbian learning', 'machine learning method', 'incremental support vector machine', 'pattern recognition', 'data s)
('student66',) -> ('information management', 'core memory', 'reinforcement learning', 'efficient selection', 'context modeling', 'energy states', 'ds', 'subsymbolic data mining', 'restricted boltzman machines', 'graphics processing units', 'equation', 'video lecture', 'correlat)
('student67',) -> ('correctness', 'fpnn', 'cardiovascular diseases', 'dynamic programming', 'statistical analysis', 'neural network hardware implementations', 'cognitive robotics', 'resource allocation', 'feedback', 'fault tolerance', 'content-addressable storage', 'scholarly co)
('student68',) -> ('storage management', 'surveillance platform', 'fine-grain parallel computing', 'production equipment', 'predictive models', 'test pattern', 'synchronization', 'probability', 'hopfield neural nets', 'order parameter coherency', 'cooperative behaviors', 'data s)
('student69',) -> ('time series analysis', 'switched capacitor networks', 'nasc', 'dwt', 'iteration algorithm', 'ix', 'mathematical model', 'industry', 'visual doom ai game', 'live data massive streaming', 'uncertainty', 'dnn', 'ix', 'decision trees', 'inference algorithms', 'big da)
('student70',) -> ('discussion forum', 'machine vision quality inspection', 'process identification', 'federated intercloud environment', 'intelligent robots', 'protection', 'class labels')
('student71',) -> ('embryo', 'deep reinforcement learning approach', 'prediction algorithms', 'field programmable gate arrays', 'on-policy reinforcement learning', 'cybernetics', 'exploratory machine learning atta)
('student72',) -> ('ix', 'pose estimation', 'knee surgeries', 'time series data', 'crisp-dm', 'clinical big data analysis', 'emotional systems', 'machine learning method', 'quaternion', 'gas turbines', 'parallel processing', 'brain modeling', 'social networks', 'multi agent systems')
('student73',) -> ('hierarchical deep learning models', 'benchmark testing', 'data mining', 'iso standards', 'ols algorithm', 'pose estimation', 'large-scale data intensive scientific application', 'simulated annealing', 'ix', 'training', 'ix', 'support vector machines')
('student74',) -> ('ix', 'pose estimation', 'knee surgeries', 'time series data', 'crisp-dm', 'clinical big data analysis', 'emotional systems', 'machine learning method', 'quaternion', 'gas turbines', 'parallel processing', 'brain modeling', 'social networks', 'multi agent systems')
('student75',) -> ('concept algebra', 'road accident occurrence status analysis', 'machine learning approach', 'nasc', 'dot product matching neural network', 'space technology', 'citical time', 'preoperative planning', 'subthreshold mos', 'qos')
('student76',) -> ('security applications', 'computer-aided diagnosis', 'cctv cameras', 'sales management', 'disclosure risk', 'massive online open course', 'dynamic loci', 'hand gesture recognition', 'humanoid robots', 'm.2 ssd cache', 'accuracy', 'life estimation', 'human comp)
('student77',) -> ('modified total sharp score', 'discriminative loss function optimization', 'deep multiple instance learning', 'dot product matching neural network', 'search space reduction', 'exploratory machine learning attack', 'bismuth', 'modified error backpropagation technique', 'critical time', 'on-chip er)
('student78',) -> ('research institutions', 'predictive models', 'cased based reasoning', 'deep q-networks', 'circuit', 'neural network', 'differential equations', 'training data', 'limited interconnection scheme', 'approximation algorithms', 'imbalance distributions', 'crowds)
('student79',) -> ('ge power and water', 'systematics', 'closed circuit television', 'up/down counter', 'metadata management', 'x-ray image', 'intelligent big data analysis architecture', 'representations learning', 'convolution neural networks', 'simulated annealing')
('student80',) -> ('inspection', 'benes interconnection network', 'security applications', 'genetic method', 'architecture', 'ix', 'x-ray imaging', 'event study', 'compensator', 'triples (data structure)', 'clinical big data analysis', 'deep learning algorithms', 'nonlinear systems')
('student81',) -> ('quality assessment', 'predictive medicine', 'text processing', 'robust deep models', 'embryo', 'ix', 'road accidents', 'jugonet', 'multilayer support vector machine', 'denotational mathematics', 'network-on-a-chip', 'education', 'benchmark deep learning datasets')
('student82',) -> ('distributed platform', 'multimedia communication', 'factor concepts', 'drug-drug interactions', 'atmospheric radiation measurement climate research facility', 'ill-protected copies', 'approximate equivalence neural network', 'human arm movement patterns', 'ha)
('student83',) -> ('rheumatoid arthritis', 'best practices', 'multiagent systems', 'disc drives', 'security applications', 'job production systems', 'dynamic', 'deep convolutional neural network', 'loss measurement', 'coal mining', 'standards organizations', 'educational courses')
('student84',) -> ('rheumatoid arthritis', 'geospatial data point processing', 'chinese web filtering', 'switched capacitor networks', 'analog computers', 'embryo', 'social set analysis', 'big data quality', 'coal mining', 'limited interconnection scheme', 'behavior changes', 'ix', 'de)
('student85',) -> ('analog computers', 'fitting', 'iterated game executions', 'best effort', 'ix', 'terrorism', 'storage capacitor', 'incremental support vector machine', 'machine learning strategies', 'distributed tensorflow')
('student86',) -> ('facebook data', 'information technology', 'human arm movement patterns', 'educational institutions', 'neural network hardware implementations', 'depth kernel learning', 'routing', 'm-th order ordinary differential equations', 'process control', 'data analytic)
('student87',) -> ('gesture recognition', 'coordinated behaviors', 'biodiversity data', 'learning algorithm', 'crowd sourcing geographic data today', 'compensation', 'routing', 'hpc collocation', 'unified modeling language', 'embedded systems', 'two-character-nouns', 'filter', 'ix', 'cloud computing', 'unlabeled/unsupervised data', 'ma', 'clinical big data', 'domain-model terms', 'force', 'matrix decomposition', 'brain', 'logic programming language', 'data preprocessing', 'oddball', 'approximate transformable technique')
('student88',) -> ('extended beam neural network model', 'graph-based unsupervised machine learning methods', 'counter-terrorism field', 'analog computation', 'drug-drug interactions', 'embryo', 'software prototyping', 'dual codes', 'automatic control', 'machine learning technique')
('student89',) -> ('encryption', 'relationship graphs', 'deep multiple instance learning', 'dot product matching neural network', 'search space reduction', 'exploratory machine learning attack', 'bismuth', 'modified error backpropagation technique', 'critical time', 'on-chip er)
('student90',) -> ('exploratory attacks', 'fault-tolerant', 'alzheimers disease classification', 'analog multiplier', 'ix', 'intelligent networks', 'signal processing algorithms', 'accelerometer', 'deep kernel learning', 'unsolicited electronic mail', 'video streaming', 'computer game')
('student91',) -> ('deep learning performance', 'time series', 'field programmable neural arrays', 'analog computers', 'clinical big data', 'apache spark mlib 2', 'backpropagation neural network', 'computer game', 'medical diagnostic imaging', 'game ai domain', 'aging')
('student92',) -> ('deep learning performance', 'time series', 'field programmable neural arrays', 'analog computers', 'clinical big data', 'apache spark mlib 2', 'backpropagation neural network', 'computer game', 'medical diagnostic imaging', 'game ai domain', 'aging')
('student93',) -> ('big data i/o performance', 'partitioning algorithms', 'commercial hotspots', 'intelligent agent', 'signal capturing', 'ordinary differential equation', 'ix', 'optimization methods', 'algebra', 'h/spl infin control', 'post synaptic potentials', 'high-perfor)
('student94',) -> ('supervised classification', 'monitoring', 'concrete', 'big-data processing performance', 'proposal', 'organization performance', 'feature extraction and classification', 'education', 'decision making', 'video games control problems', 'process identification')
('student95',) -> ('facebook data analytics', 'atmospheric radiation measurement climate research facility', 'application execution scheduling', 'fuzzy logic', 'function approximation', 'cctv cameras', 'optical fibre networks', 'self-routing', 'social media big data', 'nike', 'ix', 'de)
('student96',) -> ('case study', 'object detection', 'social set analysis', 'infinity norm', 'spark')
('student97',) -> ('fitness function', 'classification', 'reanalysis', 'infinity norm', 'spark')
('student98',) -> ('ssd cache', 'trajectory', 'road accident occurrence status analysis', 'algorithms and programming techniques for big data processing', 'deep reinforcement learning', 'random forest', 'crowd sourcing geographic data today', 'biological control systems', 'sales)
('student99',) -> ('standard feedforward networks', 'surveillance platform', 'domain model', 'gesture recognition', 'flexible beam', 'design optimization', 'netcdf file format', 'self adjusting fuzzy modeling', 'wavelet analysis', 'credit assignment problem', 'experience replay')
('student100',) -> ('dual codes', 'data distribution', 'regression method', 'logistics', 'job production systems', 'objective function', 'wavelet analysis', 'flash-based capacitor', 'ix', 'discrete wavelet transforms', 'deep kernel learning', 'hyperparameters', 'deep layers', 'ix', 'de)
('student1', student99) -> ('noise measurement')
('student1', student32) -> ('high fidelity inference capability')
('student1', student63) -> ('convolution')
('student1', student68) -> ('correctness', 'feedback')
('student1', student81) -> ('cnn implementations', 'brain modeling')
('student1', student89) -> ('big data processing')
('student1', student91) -> ('search space reduction')
('student1', student96) -> ('pattern discovery')
('student2', student14) -> ('fpna')
('student2', student16) -> ('big social data')
('student2', student37) -> ('fuzzy neural network')
('student2', student51) -> ('image sampling', 'lstm based model')
('student2', student68) -> ('modelling')
('student2', student87) -> ('deep reinforcement learning algorithm')
('student3', student32) -> ('stock markets')
('student3', student68) -> ('resources and job management system')
('student3', student89) -> ('business data')
('student3', student96) -> ('case study', 'object detection')
('student4', student8) -> ('datamining')
('student4', student29) -> ('numerical simulation')
('student4', student70) -> ('live data massive streaming')
('student4', student84) -> ('hepatitis disease diagnosis')
('student5', student6) -> ('supervised deep learning framework')
('student5', student11) -> ('online data')
('student5', student19) -> ('crossbreed genetic algorithm')
('student5', student38) -> ('file systems')
('student5', student44) -> ('semantic technologies')
('student5', student47) -> ('data archive')
('student6', student63) -> ('data quality dimension')
('student6', student19) -> ('wavelength division multiplexing')
('student6', student23) -> ('analogue processing circuits')
('student6', student30) -> ('boolean factor analysis')
('student6', student49) -> ('energy consumption', 'matrix decomposition')
('student6', student58) -> ('arthritis')
('student6', student78) -> ('crowdsourcing', 'bison')
('student6', student84) -> ('big data quality')
('student6', student97) -> ('infinity norm')
('student7', student48) -> ('multiplying circuits')
('student7', student56) -> ('dynamic backward error assignment', 'human arm movement patterns')
('student7', student66) -> ('insurance')
('student7', student82) -> ('distributed platform', 'human arm movement patterns', 'big datasets')
('student8', student17) -> ('computer resource')
('student8', student33) -> ('groupware')
('student8', student37) -> ('discrete hopfield neural network')
('student8', student41) -> ('production engineering computing')
('student8', student53) -> ('myo armband')
('student8', student65) -> ('stock market forecasting')
('student8', student75) -> ('subthreshold mos')
('student8', student87) -> ('optimal kernel function', 'mean square error methods')
('student8', student94) -> ('concrete', 'education')
('student8', student95) -> ('social media big data')
('student9', student11) -> ('deepr')
('student9', student21) -> ('fast learning')
('student9', student50) -> ('open source machine learning', 'adaptive learning')
('student9', student55) -
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File - extract\_graph\_from\_lattice  
(student12', 'student53') -> ('arm data center',)  
(student12', 'student56') -> ('fault diagnosis',)  
(student12', 'student83') -> ('disc drives',)  
(student12', 'student99') -> ('domain model',)  
(student13', 'student48') -> ('actuator',)  
(student13', 'student69') -> ('logic circuits',)  
(student13', 'student78') -> ('cased based reasoning',)  
(student13', 'student89') -> ('solid state disk',)  
(student14', 'student21') -> ('data analytics process',)  
(student14', 'student27') -> ('three layer feedforward network',)  
(student15', 'student27') -> ('neuroboard',)  
(student15', 'student55') -> ('business application',)  
(student15', 'student82') -> ('hazard',)  
(student15', 'student87') -> ('medical information systems',)  
(student16', 'student19') -> ('fault tolerant computing',)  
(student16', 'student23') -> ('spatiotemporal data',)  
(student16', 'student41') -> ('shared goal',)  
(student16', 'student52') -> ('multimedia databases',)  
(student16', 'student56') -> ('digital architecture',)  
(student16', 'student57') -> ('cognition',)  
(student16', 'student58') -> ('deep core learning', 'human pose estimation')  
(student16', 'student87') -> ('coordinated behaviors',)  
(student16', 'student95') -> ('function approximation',)  
(student17', 'student38') -> ('neural objects', 'hippocampal circuit')  
(student17', 'student44') -> ('copyright protection',)  
(student17', 'student49') -> ('sign recognition',)  
(student18', 'student19') -> ('storage cost',)  
(student18', 'student24') -> ('mathematics',)  
(student18', 'student53') -> ('big data analytics',)  
(student18', 'student55') -> ('functional regression',)  
(student18', 'student69') -> ('reliability',)  
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File - extract_graph_from_lattice
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Process finished with exit code 0