Context	Problem	Description	Instances
arcade	Blackjack_arcade	A card is randomly drawn from a deck and added to the player hand, the goal is to stop with the highest value of the hand without going over 21.	0
arcade	Eight_arcade	Squares are moved to adjacent empty cells until a specific arrangement is achieved.	0, 1
arcade	Pong_arcade	Single player pong/tennis problem.	0
arcade	Sokoban_arcade	A person pushes boxes in a warehouse onto designated storage areas, difficult domain due to dead ends.	0
arcade	Tetris_arcade	Tetris is the classic block stacking game.	0
arcade	TowerOfHanoi_arcade	The classic tower of Hanoi puzzle, where disks must be stacked onto a given rod.	0
arcade	Zombies_arcade	An epidemic game in which humans avoid becoming infected by zombies.	0, 1, 2, 3
ippc2011	CooperativeRecon_MDP_ippc2011	There is a 2d grid with an agent, a base, some hazard squares, and objects in different locations.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2011	CooperativeRecon_POMDP_ippc2011	There is a 2d grid with an agent, a base, some hazard squares, and objects in different locations. This is the pomdp version.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2011	CrossingTraffic_MDP_ippc2011	In a grid, a robot must get to a goal and avoid obstacles arriving randomly and moving left.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2011	CrossingTraffic_POMDP_ippc2011	In a grid, a robot must get to a goal and avoid obstacles arriving randomly and moving left. This is the pomdp version.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2011	Elevators_MDP_ippc2011	This domain has a number of elevators delivering passengers to either the top or the bottom floor.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2011	Elevators_POMDP_ippc2011	This domain has a number of elevators delivering passengers to either the top or the bottom floor. This is the pomdp version.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2011	GameOfLife_MDP_ippc2011	A simple DBN to encode Conway's cellular automata game of life on a grid.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2011	GameOfLife_POMDP_ippc2011	A simple DBN to encode Conway's cellular automata game of life on a grid. This is the pomdp version.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2011	Navigation_MDP_ippc2011	In a grid, a robot must get to a goal G, and every cell offers the robot a (different) chance of disappearing.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2011	Navigation_POMDP_ippc2011	In a grid, a robot must get to a goal G, and every cell offers the robot a (different) chance of disappearing. This is the pomdp version.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2011	SkillTeaching_MDP_ippc2011	The agent is trying to teach a series of skills to a student through the use of hints and multiple choice questions.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2011	SkillTeaching_POMDP_ippc2011	The agent is trying to teach a series of skills to a student through the use of hints and multiple choice questions. This is the pomdp version.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2011	SysAdmin_MDP_ippc2011	An example RDDL description for the well-known SysAdmin problem.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2011	SysAdmin_POMDP_ippc2011	An example RDDL description for the well-known SysAdmin problem. This is the pomdp version	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2011	Traffic_CTM_MDP_ippc2011	A simple binary version of the cell transition model (CTM) for modeling traffic.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2011	Traffic_CTM_POMDP_ippc2011	A simple binary version of the cell transition model (CTM) for modeling traffic. This is the pomdp version	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2014	AcademicAdvising_MDP_ippc2014	In this domain, a student may take courses at a given cost and passes the course with a probability determined by how many of the prerequisites they have successfully passed.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2014	AcademicAdvising_POMDP_ippc2014	In this domain, a student may take courses at a given cost and passes the course with a probability determined by how many of the prerequisites they have successfully passed. This is the pomdp version	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2014	CrossingTraffic_MDP_ippc2014	In a grid, a robot must get to a goal and avoid obstacles arriving randomly and moving left.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2014	CrossingTraffic_POMDP_ippc2014	In a grid, a robot must get to a goal and avoid obstacles arriving randomly and moving left. This is the pomdp version	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2014	Elevators_MDP_ippc2014	This domain has a number of elevators delivering passengers to either the top or the bottom floor.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2014	Elevators_POMDP_ippc2014	This domain has a number of elevators delivering passengers to either the top or the bottom floor. This is the pomdp	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2014	SkillTeaching_MDP_ippc2014	In this domain, the agent is trying to teach a series of skills to a student through the use of hints and multiple choice questions.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2014	SkillTeaching_POMDP_ippc2014	In this domain, the agent is trying to teach a series of skills to a student through the use of hints and multiple choice questions. This is the pomdp version	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2014	Tamarisk_MDP_ippc2014	The agent manages the spread of an invasive plant species, by manually intervening to eridaticate them or restore the native species.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2014	Tamarisk_POMDP_ippc2014	The agent manages the spread of an invasive plant species, by manually intervening to eridaticate them or restore the native species. This is the pomdp version	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2014	Traffic_MDP_ippc2014	A simple binary version of the cell transition model (CTM) for modeling traffic.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2014	Traffic_POMDP_ippc2014	A simple binary version of the cell transition model (CTM) for modeling traffic. This is the pomdp verion	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2014	TriangleTireworld_MDP_ippc2014	In short, this problem was intended to be difficult for determinization/replanning approaches since the highest probability path to the goal is longer than other lower probability (but still possible) paths to the goal.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2014	TriangleTireworld_POMDP_ippc2014	In short, this problem was intended to be difficult for determinization/replanning approaches since the highest probability path to the goal is longer than other lower probability (but still possible) paths to the goal. This is the pomdp version	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2014	Wildfire_MDP_ippc2014	A boolean version of the wildfire fighting domain.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2014	Wildfire_POMDP_ippc2014	A boolean version of the wildfire fighting domain. This is the pomdp version	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
ippc2018	AcademicAdvising_ippc2018	In this domain, a student may take courses at a given cost and passes the course with a probability determined by how many of the prerequisites they have successfully passed.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20
ippc2018	ChromaticDice_ippc2018	Chromatic Dice is a variant of the popular dice game Yahtzee (also known as Kniffel).	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20
ippc2018	CooperativeRecon_ippc2018	In this domain, the planner controls one or more planetary rovers that examine objects of interest in order to detect life and take a picture of it.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20
ippc2018	EarthObservation_ippc2018	The Earth Observation domain models a satellite orbiting Earth that can take pictures of the landscape below with a camera.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20
ippc2018	Manufacturer_ippc2018	In this domain, the agent manages a manufacturing company that buys goods to use them in the production of other goods.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20
ippc2018	PushYourLuck_ippc2018	As the name suggest, Push Your Luck is an artificial version of a "push your luck" game like, for instance, Can't Stop.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20
ippc2018	RedFinnedBlueEye_ippc2018	The Red-finned Blue-eye domain tackles the problem of eradicating the invasive Gambusia from the habitat of the red-finned blue-eye.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20
ippc2018	WildlifePreserve_V1_ippc2018	The aim of the Wildlife Preserve domain is to protect a wildlife preserve from poachers by sending available ranger to areas.	1
ippc2018	WildlifePreserve_V10_ippc2018	The aim of the Wildlife Preserve domain is to protect a wildlife preserve from poachers by sending available ranger to areas.	10
ippc2018	WildlifePreserve_V11_ippc2018	The aim of the Wildlife Preserve domain is to protect a wildlife preserve from poachers by sending available ranger to areas.	11
ippc2018	WildlifePreserve_V12_ippc2018	The aim of the Wildlife Preserve domain is to protect a wildlife preserve from poachers by sending available ranger to areas.	12
ippc2018	WildlifePreserve_V13_ippc2018	The aim of the Wildlife Preserve domain is to protect a wildlife preserve from poachers by sending available ranger to areas.	13
ippc2018	WildlifePreserve_V14_ippc2018	The aim of the Wildlife Preserve domain is to protect a wildlife preserve from poachers by sending available ranger to areas.	14
ippc2018	WildlifePreserve_V15_ippc2018	The aim of the Wildlife Preserve domain is to protect a wildlife preserve from poachers by sending available ranger to areas.	15
ippc2018	WildlifePreserve_V16_ippc2018	The aim of the Wildlife Preserve domain is to protect a wildlife preserve from poachers by sending available ranger to areas.	16
ippc2018	WildlifePreserve_V17_ippc2018	The aim of the Wildlife Preserve domain is to protect a wildlife preserve from poachers by sending available ranger to areas.	17
ippc2018	WildlifePreserve_V18_ippc2018	The aim of the Wildlife Preserve domain is to protect a wildlife preserve from poachers by sending available ranger to areas.	18
ippc2018	WildlifePreserve_V19_ippc2018	The aim of the Wildlife Preserve domain is to protect a wildlife preserve from poachers by sending available ranger to areas.	19
ippc2018	WildlifePreserve_V2_ippc2018	The aim of the Wildlife Preserve domain is to protect a wildlife preserve from poachers by sending available ranger to areas.	2
ippc2018	WildlifePreserve_V20_ippc2018	The aim of the Wildlife Preserve domain is to protect a wildlife preserve from poachers by sending available ranger to areas.	20
ippc2018	WildlifePreserve_V3_ippc2018	The aim of the Wildlife Preserve domain is to protect a wildlife preserve from poachers by sending available ranger to areas.	3
ippc2018	WildlifePreserve_V4_ippc2018	The aim of the Wildlife Preserve domain is to protect a wildlife preserve from poachers by sending available ranger to areas.	4
ippc2018	WildlifePreserve_V5_ippc2018	The aim of the Wildlife Preserve domain is to protect a wildlife preserve from poachers by sending available ranger to areas.	5
ippc2018	WildlifePreserve_V6_ippc2018	The aim of the Wildlife Preserve domain is to protect a wildlife preserve from poachers by sending available ranger to areas.	6
ippc2018	WildlifePreserve_V7_ippc2018	The aim of the Wildlife Preserve domain is to protect a wildlife preserve from poachers by sending available ranger to areas.	7
ippc2018	WildlifePreserve_V8_ippc2018	The aim of the Wildlife Preserve domain is to protect a wildlife preserve from poachers by sending available ranger to areas.	8
ippc2018	WildlifePreserve_V9_ippc2018	The aim of the Wildlife Preserve domain is to protect a wildlife preserve from poachers by sending available ranger to areas.	9
ippc2023	HVAC_ippc2023	Multi-zone and multi-heater HVAC control problem	0, 1, 2, 3, 4, 5, 6, 7
ippc2023	MarsRover_ippc2023	Multi Rover Navigation, where a group of agent needs to harvest mineral	0, 1, 2, 3, 4, 5
ippc2023	MountainCar_ippc2023	A simple continuous MDP for the classical mountain car control problem	1, 2, 3, 4, 5
ippc2023	PowerGen_ippc2023	A continuous simple power generation problem loosely modeled on the problem of unit commitment	1, 2, 3, 4, 5
ippc2023	RaceCar_ippc2023	A simple continuous MDP for the racecar problem	0, 1, 2, 3, 4, 5, 6
ippc2023	RecSim_ippc2023	A problem of recommendation systems, with consumers and providers	0, 1, 2, 3, 4, 5, 6, 7
ippc2023	Reservoir_ippc2023	Continuous action version of management of the water level in interconnected reservoirs	1, 2, 3, 4, 5
ippc2023	UAV_ippc2023	Continuous action space version of multi-UAV problem where a group of UAVs have to reach goal positions in the 3d Space	1, 2, 3, 4, 5
gym	CartPole_Continuous_gym	A simple continuous state-action MDP for the classical cart-pole system by Rich Sutton, with actions that describe the continuous force applied to the cart.	0
gym	CartPole_Discrete_gym	A simple continuous state discrete action MDP for the classical cart-pole system by Rich Sutton, with actions that describe the direction of the force applied to the cart.	0
gym	MountainCar_Continuous_gym	A simple continuous MDP for the classical mountain car control problem.	0
gym	MountainCar_Discrete_gym	A simple continuous MDP with discrete actions for the classical mountain car control problem.	0
gym	Pendulum_gym	The classical pendulum control problem.	0
or	BinPacking_or	Items of random weight are drawn, the goal is to place them into bins while minimizing the number of bins used and the total weight of each bin is within limits.	0
or	Knapsack_or	Items of random weight and value are drawn, the goal is to place them into knapsacks of limited total weight while maximizing total value of all items.	0
or	Option_or	Exercise an American max option on correlated assets.	0, 1
or	SupplyChain_or	A supply chain with factory and multiple warehouses.	0
or	TSP_or	The travelling salesman problem.	0
rddlsim	ComplexSysAdmin_rddlsim	The well known sys-admin problem with a number of enhancements.	0
rddlsim	Logistics_rddlsim	A logistics problem extended from the standard Box-Truck World.	0
rddlsim	Pizza_rddlsim	A pizza delivery task.	0
rddlsim	PropDBN_rddlsim	Simple propositional DBN.	0
rddlsim	Sidewalk_rddlsim	One or more people walking down a sidewalk with 2 lanes.	0, 1
rddlsim	Workforce_rddlsim	Running a call center.	0
standalone	Bicycle	Control a bicycle physics problem.	0
standalone	Elevators	The Elevator domain models evening rush hours when people from different floors in a building want to go down to the bottom floor using elevators.	0, 1
standalone	HVAC	Room temperature control simulation.	0, 1
standalone	Intruders_Continuous	Continuous intruder detection problem on a unit square.	0
standalone	Intruders_Discrete	Discrete intruder detection problem on a grid.	0
standalone	Navigation_Continuous	Continuous state action navigation problem with regions to be avoided.	0
standalone	PowerGen_Continuous	A simple continuous version of the power generation problem, loosely modeled on the problem of unit commitment.	0
standalone	PowerGen_Discrete	A simple power generation problem loosely modeled on the problem of unit commitment.	0
standalone	Quadcopter	Control a swarm of four-propeller drones in 3D space.	0, 1
standalone	Reservoir_Continuous	Continuous action version of management of the water level in interconnected reservoirs.	0, 1
standalone	Reservoir_Discrete	Discrete action version of management of the water level in interconnected reservoirs.	0, 1
standalone	TrafficBLX_ComplexPhases	BLX/QTM traffic signal control model with a generic phasing scheme. The goal is to control traffic lights to minimize total travel time.	0
standalone	TrafficBLX_SimplePhases	BLX/QTM traffic signal control model with a fixed phase progression consisting of 4 phases. The goal is to control traffic lights to minimize total travel time.	0
standalone	UAV_Continuous	Continuous action space version of multi-UAV problem where a group of UAVs have to reach goal positions in the 3d Space.	0, 1
standalone	UAV_Discrete	Discrete action space version of multi-UAV problem where a group of UAVs have to reach goal positions in the 3d Space.	0
standalone	UAV_Mixed	Mixed action space version of multi-UAV problem where a group of UAVs have to reach goal positions in the 3d Space.	0