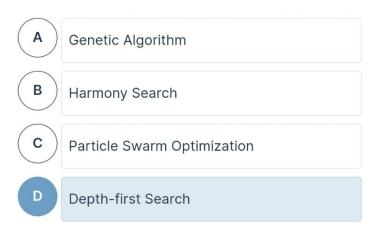


Which of the following algorithms is NOT an evolutionary algorithm?





Which of the following knowledge is NOT required for applying evolutionary algorithms?

A Fitness function

B Gradient/Derivative of the problem function.

C How an individual can be evaluated.

How to create new individual.

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Which of the following operators DOES NOT create new offspring from the current population?

A Crossover

B Mutation

C Selection

D Update parameter values of individuals.

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D

How are the offspring solution compared to the parent solutions?

- A Offspring are often better than parents.
- B Parents are often better than offspring.
- Parents and offspring have the same quality on average.
- It depends on the variation operators (i.e., crossover, mutation,...).

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When can we terminate the run of an evolutionary algorithm?

- ig(f Aig) The computing budget is run out.
- B All the population converges to the same individual.
- (C) An acceptable solution has been obtained.
- $\left(\begin{array}{c} \mathbf{D} \end{array}\right)$ All of the above.

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What do you think is the strongest advantage of evolutionary algorithms over other kinds of optimization methods?

- A Gradients or problem-specific knowledge are not required.
- B The framework of evolutionary algorithms is easy to implemented.
- A population of multiple individuals is often maintained and operated, thereby resulting in an implicit parallelism.
- (D) Local optima can be easily escaped.