



PES
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Observation Table – Model Benchmark:

Task	Model	Classification (Success/Failure)	Observation (What actually happened?)	Why did this happen? (Architectural Reason)
Generation	BERT ▾	Failure ▾	Generated repeated punctuation (dots) instead of meaningful text.	BERT is an encoder-only model and is not trained for autoregressive text generation.
	RoB... ▾	Failure ▾	Failed to generate new text and returned the input prompt unchanged.	RoBERTa is also encoder-only and lacks a decoder for token-by-token generation.
	BART ▾	Success ▾	Generated new tokens, but output was long, noisy, and incoherent.	BART has an encoder–decoder architecture, enabling generation, though the base model is not tuned for causal generation.
Fill-Mask	BERT ▾	Success ▾	Correctly predicted words such as “generate” and “create”.	BERT is trained using Masked Language Modeling (MLM).
	RoB... ▾	Success ▾	Produced accurate and high-confidence predictions similar to BERT.	RoBERTa improves MLM training with more data and better optimization.
	BART ▾	Partial Suc... ▾	Predicted reasonable words but with weaker confidence.	BART is trained for denoising sequence-to-sequence tasks, not pure MLM.
Question Answering	BERT ▾	Partial Failure ▾	Returned a partial answer (“and deepfakes”) with very low confidence score.	The base BERT model is not fine-tuned on QA datasets like SQuAD.
	RoB... ▾	Partial Failure ▾	Produced an irrelevant answer (“Generative”) with extremely low confidence.	QA head is randomly initialized without task-specific fine-tuning.

	BART ▾	Partial Failure ▾	Returned an incomplete answer (“such”) with low confidence score.	Base BART is designed for generation and requires QA fine-tuning for accurate extraction.
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