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| Task Type | Model | Classification | Observation | Reason (Training + Architecture) |
|--------------------------|---------|----------------------------|--|--|
| Text Generation | BERT | Failure | Cannot generate meaningful text | Encoder-only model trained for masked language modeling; lacks a decoder for next-token generation |
| Text Generation | RoBERTa | Failure | Produces incoherent or no output | Encoder-only architecture similar to BERT; not designed for sequential text generation |
| Text Generation | BART | Success | Generates fluent and relevant text | Encoder-decoder architecture with an autoregressive decoder trained for sequence-to-sequence tasks |
| Masked Language Modeling | BERT | Success | Correctly predicts words like "create" | Trained specifically on MLM using a bidirectional encoder that uses full context |
| Masked Language Modeling | RoBERTa | Success | Produces accurate masked word predictions | Improved MLM training strategy with optimized bidirectional attention |
| Masked Language Modeling | BART | Partial / Moderate Success | Predicts missing words with lower accuracy | Not primarily trained for MLM; encoder-decoder design is less optimal for masked prediction |
| Question Answering | BERT | Partial / Poor | Extracts relevant spans inconsistently | Base model not fine-tuned for QA; lacks task-specific QA head |

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|--------------------|---------|----------------|---|---|
| Question Answering | RoBERTa | Partial / Poor | Answers vary in accuracy | Requires fine-tuning on QA datasets for reliable span extraction |
| Question Answering | BART | Moderate | Generates answers instead of extracting | Generative encoder-decoder model produces sequences rather than extracting answer spans |