# VIRTUNEXA PYTHON DEVELOPMENT TASK-1

**PROGRAM:**

```
import time
import threading
# Countdown Timer Function
def countdown_timer():
    user_input = input("Enter countdown time (e.g., 10s or 1m): ").strip().lower()
    try:
        if user_input.endswith("s"):
            total_seconds = int(user_input[:-1])
        elif user_input.endswith("m"):
            total_seconds = int(user_input[:-1]) * 60
        else:
            print("Invalid format! Use 's' for seconds or 'm' for minutes.")
            return
        print(f"\n ⏳ Countdown started for {total_seconds} seconds...\n")
        def run_timer():
            for remaining in range(total_seconds, 0, -1):
                mins, secs = divmod(remaining, 60)
                print(f"Time left: {mins:02d}:{secs:02d}", end='\r')
                time.sleep(1)
            print("\n ⏰ Time's up!")
        threading.Thread(target=run_timer).start()
    except ValueError:
        print("Please enter a valid number with 's' or 'm'.")
```

```
# Calculator Function
def calculator():
    expression = input("Enter an arithmetic expression (e.g., 2 + 3 * 4): ")
    try:
        result = eval(expression, {"__builtins__": None}, {})
        print(f"Result: {result}")
    except ZeroDivisionError:
        print("Error: Cannot divide by zero.")
    except Exception:
        print("Error: Invalid expression!")
# Main Menu
def main():
    while True:
        print("\n--- Countdown Timer & Calculator ---")
        print("1. Start Countdown Timer")
        print("2. Use Calculator")
        print("3. Exit")
        choice = input("Choose an option (1-3): ").strip()
        if choice == "1":
            countdown_timer()
        elif choice == "2":
            calculator()
        elif choice == "3":
            print("Goodbye!")
            break
        else:
```

```
        print("Invalid choice. Please enter 1, 2, or 3.")

# Entry Point
if __name__ == "__main__":
    main()
```

**OUTPUT:**