

**CODE**

class AuctionItem:

def \_\_init\_\_(self, item\_name, initial\_price):

self.item\_name = item\_name

self.current\_price = initial\_price

self.highest\_bidder = None

self.is\_closed = False

def place\_bid(self, bidder, bid\_amount):

if self.is\_closed:

raise AuctionClosedException("Auction is closed")

if bid\_amount <= self.current\_price:

raise BidTooLowException("Bid is too low")

self.current\_price = bid\_amount

self.highest\_bidder = bidder

def close\_auction(self):

self.is\_closed = True

class AuctionClosedException(Exception):

pass

class BidTooLowException(Exception):

pass

def main():

item = AuctionItem("Antique Vase", 100)

print(f"Current Item: {item.item\_name}")

while not item.is\_closed:

try:

bidder = input("Enter your name: ")

bid\_amount = float(input("Enter your bid amount: $"))

item.place\_bid(bidder, bid\_amount)

print(f"{bidder} placed a bid of ${bid\_amount}")

except (AuctionClosedException, BidTooLowException) as e:

print(f"Error: {e}")

except ValueError:

print("Invalid input. Please enter a valid bid amount.")

print(f"Auction closed! {item.highest\_bidder} won the {item.item\_name} for ${item.current\_price}")

if \_\_name\_\_ == "\_\_main\_\_":

main()