```bash
#!/bin/bash

# AUTHOR="Michael Gruenstaeudl, PhD"
# COPYRIGHT="Copyright (C) 2016-2018 $AUTHOR"
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# VERSION="2018.04.03.1800"
# USAGE="bash Script4.sh $FINAL_ASMBLY $LOG"

########################################################################
# SUPPLEMENTARY FILE 4                                                  #
# Bash script to automate the confirmation of IR boundaries via        #
# self-blasting.                                                       #
########################################################################

# Check if sufficient commandline parameters
numArgmts=$#
if [ ! $numArgmts -eq 2 ]; then
    echo "ERROR | Incorrect number of commandline parameters" >&2
    exit 1
fi

# Check if input files exist
for v in "$@"; do
if [ ! -f "$v" ]; then
    echo "ERROR | File not found: $v" >&2
    exit 1
fi
done

# Check if dependencies exist
DEPS=(blastn)
for d in "${DEPS[@]}"; do
if ! [ -x "$(command -v $d)" ]; then
  echo "Error: $d is not installed" >&2
  exit 1
fi
done

# Assigning commandline arguments
FINAL_ASMBLY=$1
LOG=$2

# Logging results
echo -en "\n# SELF-BLASTING" >> $LOG
echo -e "\n# alignment length, IRa start, IRa end, IRb end, IRb start" >> $LOG

# Self-blasting
blastn -query $FINAL_ASMBLY -subject $FINAL_ASMBLY -outfmt 7 -strand 'both' | awk '{
 if ($4 > 10000 && $4 < 50000) print $4, $7, $8, $9, $10}' >> $LOG

#EOF
```