1. Napisz skrypt, który pobiera listę adresów IP (z pliku lub argumentów wejściowych), a następnie sprawdza reputację każdego z nich, korzystając z API AbuseIPDB. Wyniki zapisz do pliku CSV

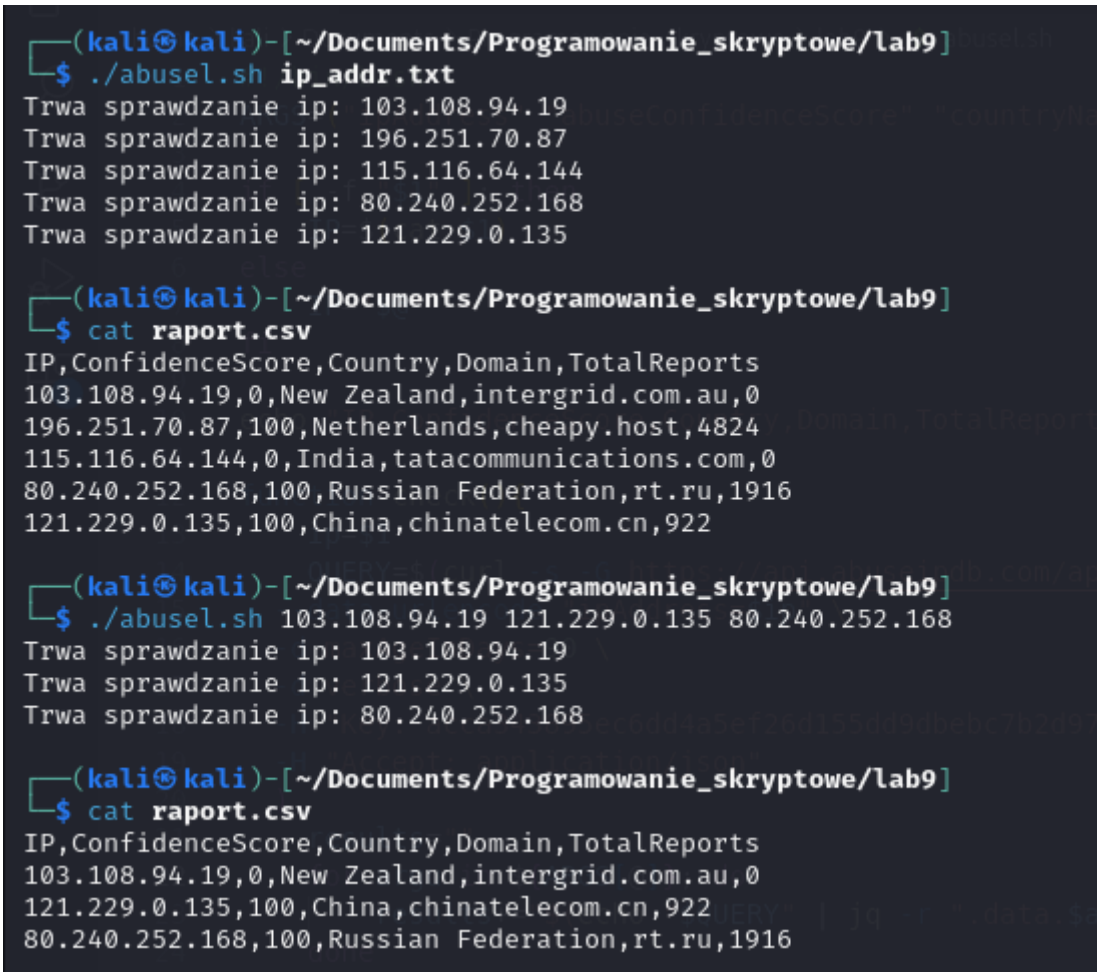
```bash
#!/bin/bash
ARGS=("ipAddress" "abuseConfidenceScore" "countryName" "domain" "totalReports")

if [ -f "$1" ]; then
    IP=$(cat $1)
else
    IP="$@"
fi

echo "IP,ConfidenceScore,Country,Domain,TotalReports" > raport.csv

function check(){
    ip=$1
    QUERY=$(curl -s -G https://api.abuseipdb.com/api/v2/check \
  --data-urlencode "ipAddress=$ip" \
  -d maxAgeInDays=90 \
  -d verbose \
  -H "Key: acca343895ec6dd4a5ef26d155dd9dbebc7b2d978fe9e5752c3f53ada892f6177d6b280af23c81d6" \
  -H "Accept: application/json"
  )
    results=""
    for argu in ${ARGS[@]}; do
        results+="$(echo "$QUERY" | jq -r ".data.$argu"),"
    done
    results="${results%,}"
    echo $results >> raport.csv
}

for ip in ${IP[@]}; do
    echo "Trwa sprawdzanie ip: $ip"
    check $ip
done
```



2. Napisz skrypt, który wyświetli podstawowe dane i listę otwartych portów dla podanego adresu IP przez API Shodan (zoomeye).

$ shodan.sh

```bash
#!/bin/bash

api_key="[redacted]"
if [ -f "$1" ]; then
    IP=$(cat $1)
else
    IP="$@"
fi

function checkIP(){
    request=$(curl -s -X GET "https://api.shodan.io/shodan/host/$1?key=$api_key" )
    echo "Organisation: $(echo "$request" | jq -r '.org' ) "
    echo "ISP: $(echo "$request" | jq -r '.isp' )"
    echo "Country: $(echo "$request" | jq -r '.country_code')"
    echo "City: $(echo "$request" | jq -r '.data[0].location.city' )"
    echo "Hostnames: $(echo "$request" | jq -r '.data[0S].hostnames[]' )"
    echo "OS: $(echo "$request" | jq -r '.data[1].cpe23[1]')"
    echo "Open ports: $(echo "$request" | jq -r '.ports' )"
    echo ""
    echo ""
}

for ip in ${IP[@]}; do
    echo "Checking $ip..."
    checkIP $ip
done
```

```
┌──(kali㉿kali)-[~/Documents/Programowanie_skryptowe/lab9]
└─$ ./shodan.sh ip_addr.txt
Checking 196.251.70.87 ...
Organisation: internet-security-cheapyhost
ISP: cheapy.host LLC
Country: NL
City: Amsterdam
Hostnames:
OS: null
Open ports: [
  22
]


Checking 121.229.0.135 ...
Organisation: CHINANET jiangsu province network
ISP: CHINANET-BACKBONE
Country: CN
City: Shanghai
Hostnames:
OS: cpe:2.3:o:debian:debian_linux
Open ports: [
  123,
  21,
  22
]
```