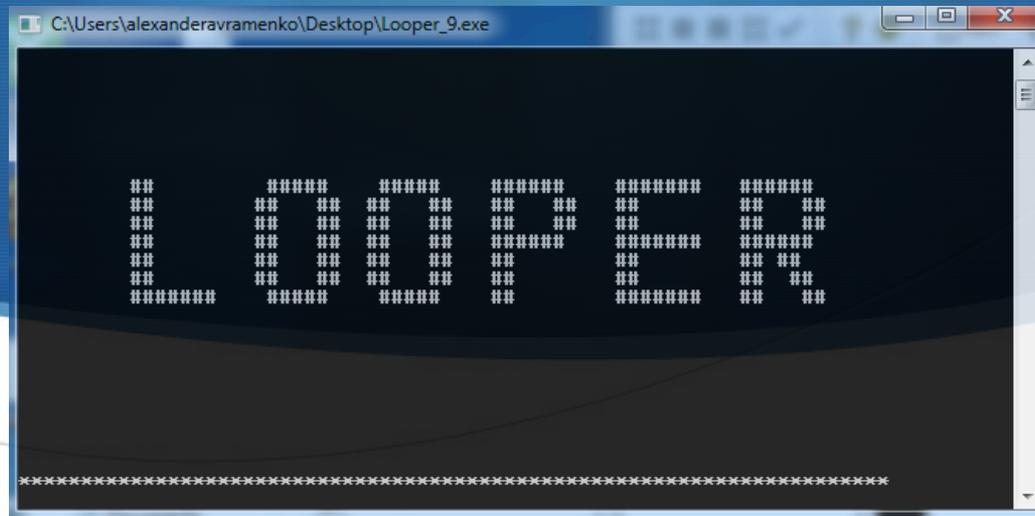


# Looper

By Alex Avramenko



# Brief Description

- ◆ Loop Ray/Reflec
- ◆ User-friendly.
- ◆ Easy 2 Dimensional Permutations
- ◆ Written in C++

# Disclaimers/Limitations

- ◆ Can do only up to 1000 runs.
- ◆ Can not be used simultaneously by more than one person in the same server file. (because of Run file creation)

# Input file

```
NO
NO
1
1
GR
620
620
0
Au
0
19.3
88.45
86.08
100
-1
3
90
10 15 20 25 23 22 21 19 18 17 16
```

*12 permutations*

```
0.65
11
← Enter for Reflec
yes
53
7
128
yes
no
yes
1
yes
1
3
10 15 20 25 23 22 21 19 18 17 16
EXIT
```

*12 permutations*

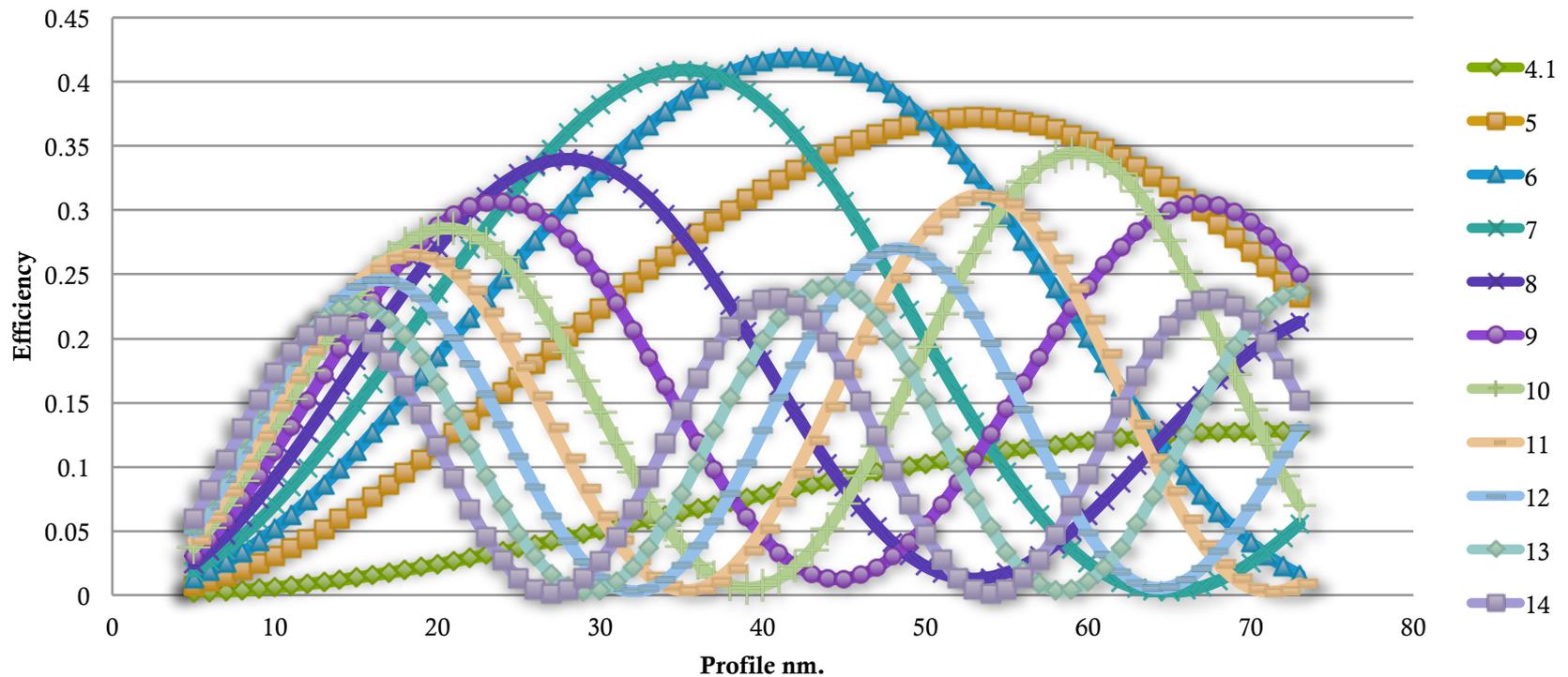
# Editor

- ◆ Value (v) -- Constant value
- ◆ Manual (m)
- ◆ Jump (j)
  - ◆ Positive or negative
- ◆ Sequence (s)
  - ◆ Runs=4, First number=1, Second number=2.
  - ◆ Output: (1, 1.25, 1.5, 1.75, 2)
- ◆ File (f)

# 2 Dimensional simulation

759 runs of Reflec  
>24,000 enter clicks.

**Profile optimisation for each angle. Done for a grating.**



# Process

File Reads:

- A
- B
- C
- D
- E
- F
- G
- H
- ...



Name of file?

Positive(3)

Amount ?

Negative (-2)

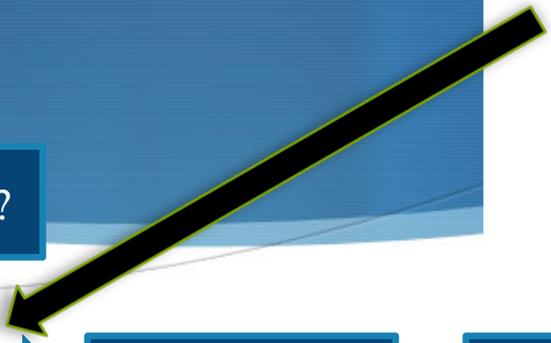
Reps? (3)

Program read:  
A  
B  
C  
A  
B  
C

Zero

Program read:  
A  
B  
C  
D  
E  
F

Program read:  
A  
A  
A  
B  
B  
B



# Sample

INPUT FFILE ( Spaces  
are real entries)  
STARTS HERE

Energy eV  
gr 500  
150 600  
150 700  
800  
900

-1

Profile nm  
88.4907  
86.0780  
177.25

15

53  
7  
3

3  
15  
9

abc.txt

Runs= 50 (10\*50)

Energy:

Amount=5

Profile

Amount= -10

Reps = 5

Names: abc.txt

Amount = 0

# Troubleshooting

- ◆ Check the created Run files.
- ◆ Source code available but written in a rush!

Thank you for your  
attention

Any Questions?

