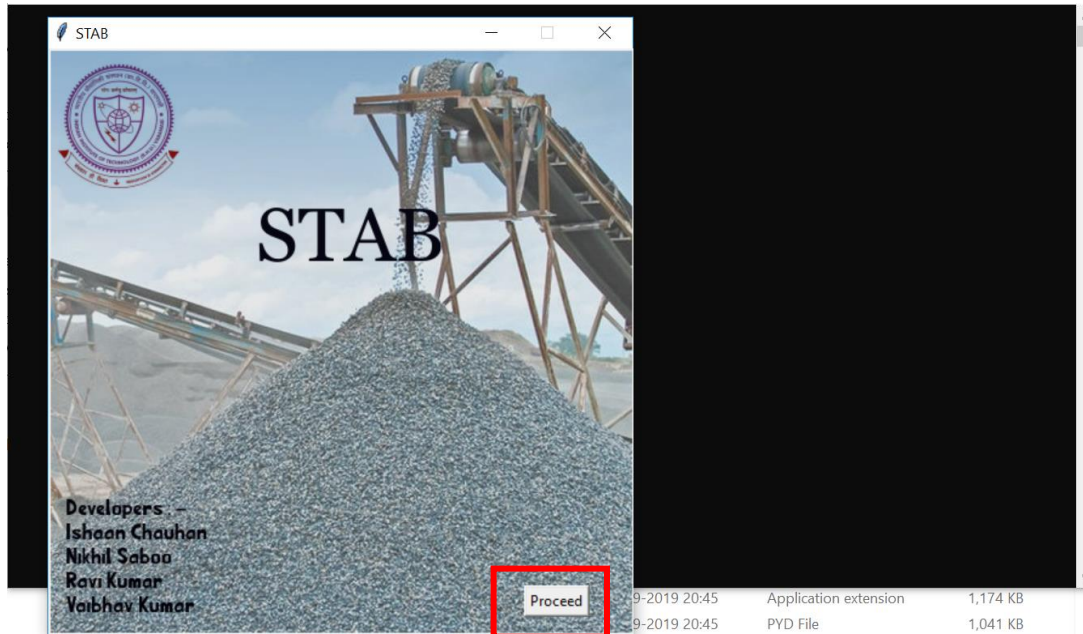
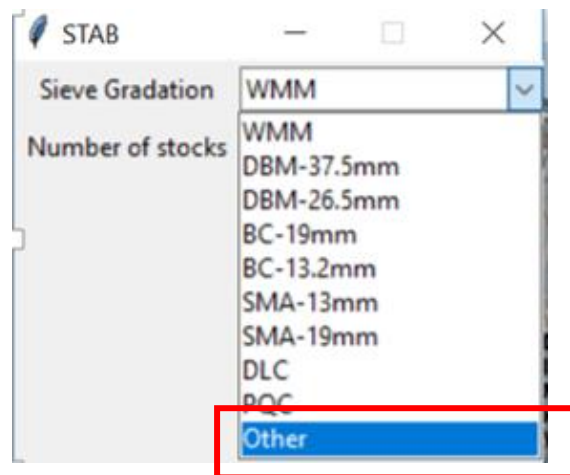
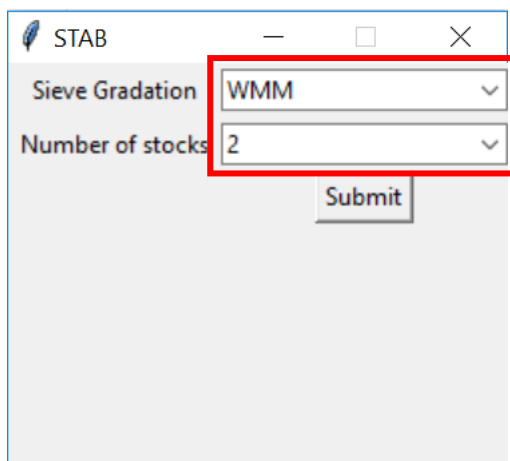


HELP FILE “STAB”

- Double click on “STAB.exe” to start the program.



- Click on “Proceed”



- Choose gradation (For Highway Construction in India, few common gradations as per MoRTH has been provided. For any other custom gradation choose “**Other**”)
- Enter the number of stocks (any value between **2-5**)

STAB

Sieve Gradation: Other

Number of stocks: 4

Number of sieves: 7

Submit

- Enter the “Number of Sieves” (It can be any number depending on the specific gradation)

STAB

Sieve Gradation: Other

Number of stocks: 4

Number of sieves: 9

Submit

Enter bounds expressed as percentage passing

Sieve Sizes	Lower Bound	Upper Bound
Sieve 1		
Sieve 2		
Sieve 3		
Sieve 4		
Sieve 5		
Sieve 6		
Sieve 7		
Sieve 8		
Sieve 9		

Enter weights retained on sieves

Sieve Sizes	Stock 1	Stock 2	Stock 3	Stock 4
Sieve 1				
Sieve 2				
Sieve 3				
Sieve 4				
Sieve 5				
Sieve 6				
Sieve 7				
Sieve 8				
Sieve 9				
Pan				

Calculate

- Enter the “lower bounds” and “upper bounds” values as per the outlined specification.

- For the chosen number of stockpiles enter the weight retained based on sieve size distribution in laboratory
- Also include the weight retained on “Pan”
- The image below shows an example of dense bituminous concrete (commonly used in India for surface courses)

STAB

Sieve Gradation: Other Number of sieves: 9

Number of stocks: 4

Submit

Enter bounds expressed as percentage passing

Sieve Sizes	Lower Bound	Upper Bound
Sieve 1	90	100
Sieve 2	70	88
Sieve 3	53	71
Sieve 4	42	58
Sieve 5	34	48
Sieve 6	26	38
Sieve 7	18	28
Sieve 8	12	20
Sieve 9	4	10

Enter weights retained on sieves

Sieve Sizes	Stock 1	Stock 2	Stock 3	Stock 4
Sieve 1	370	0	0	0
Sieve 2	1266	0	0	0
Sieve 3	1422	911	0	0
Sieve 4	32	547	10	0
Sieve 5	0	63	63	0
Sieve 6	0	1	40	0
Sieve 7	0	1	35	0
Sieve 8	0	1	26	0
Sieve 9	0	1	22	3
Pan	0	5	21	97

Calculate

- Hit “Calculate” and “Wait” [The black console window has been provided for “Windows version” indicating the progress of the program].
- Please note that the waiting time will vary depending on the working system and number of stockpiles. Please be patient and let the program complete.

STAB

Sieve Gradation: Other Number of sieves: 9

Number of stocks: 4

Submit

Enter bounds expressed as percentage passing

Sieve Sizes	Lower Bound	Upper Bound
Sieve 1	90	100
Sieve 2	70	88
Sieve 3	53	71
Sieve 4	42	58
Sieve 5	34	48
Sieve 6	26	38
Sieve 7	18	28
Sieve 8	12	20
Sieve 9	4	10

Enter weights retained on sieves

Sieve Sizes	Stock 1	Stock 2	Stock 3	Stock 4
Sieve 1	370	0	0	0
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Sieve 3	1422	911	0	0
Sieve 4	32	547	10	0
Sieve 5	0	63	63	0
Sieve 6	0	1	40	0
Sieve 7	0	1	35	0
Sieve 8	0	1	26	0
Sieve 9	0	1	22	3
Pan	0	5	21	97

Calculate

Number of solutions: 915

Best Solution: [38, 8, 52, 2]

Report created in reports directory: Report.txt

- After the completion of data processing, “Number of Solutions” and “Best Solution” will be displayed. The “Best Solution” is obtained by minimizing the least square error corresponding to the mid-point gradation.

- A report file is also generated with “all the possible solutions”. The file can be found in the “reports” folder as Report.txt
- Please note that the possible solutions generated are sorted corresponding to the “errors” in ascending order.

Report - Notepad

File	Edit	Format	View	Help

It is recommended that the program be run on a system with atleast 4 GB RAM (for better speed).

For any further queries kindly contact:

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