Deadline is 1st Sept. 10 PM

ID	Name of student 1	Roll Number	Name of student 2	Roll number2	Phase-1 methods		Task	Marks		
								Caode (10)	Slides (4)	Viva (6)
1	Jaideep P Buksagarmath	190122023	Kaushalendra P	190104042	Bounding phase method	Interval halving method	(1) Couple both codes and solve the problems for different input values (2) make the slides on your results (3) Discuss them and provide conclusion			
2	Vikas Bhushan	226103010	Aditya Sharma	226103001	Exhuastive search method	Golden section search method				
3	Bhavesh Sanjay Thengadi	190103099	Harsh Ajay Rana	190103108	Bounding phase method	Netwon Raphson method				
4	Atharva Shrawge	190103020	Chammandi Ravi Kiran	190103028	Bounding phase method	Biesection method				
5	Varshith Kancharla	190103047	Vishal Yadav	190103104	Bounding phase method	Secant method				
6	Vanshaj wore	190103101	Deepesh panwar	190103033	Bounding phase method	Interval halving method				
7	Rahul Aggarwal	190103120	Simran Garg	190101086	Bounding phase method	Golden section search method				
8	VAIBHAV RAMAN PRATAP	226103009	ABHIMANYU SINGH	216103104	Exhuastive search method	Netwon Raphson method				
9	Rajkamal Das	224363005	Vivek Raj	224363009	Exhuastive search method	Biesection method				
10	Kudipudi Sree Rakhi	190103052	Shinde Shardul Namdev	190103090	Bounding phase method	Secant method				
11	Om chourasia	224103217	Shailesh Kumar	224103222	Exhuastive search method	Interval halving method				
12	Juned Akhtar	224363003	Lalit Kumar	224363004	Exhuastive search method	Golden section search method				
13	Shaurya Pandey	224363006	Anshul Khasa	224363002	Exhuastive search method	Netwon Raphson method				
14	Shashi kapoor verma	224103431	Avinash choudhari	224103409	Exhuastive search method	Biesection method				
15	Shrey Gupta	190103117	Garvit Kaushik	190103107	Bounding phase method	Secant method				
16	JAY HADIYAL	224103001	Partha Pratim Nath	224103218	Exhuastive search method	Interval halving method				
17	Mohit Roshan	190103058	Pratyanshu Raj Singh	190103069	Bounding phase method	Golden section search method				
18	Debottam Bhowmik	226103003	Rupendra Kumar Verma	226103012	Exhuastive search method	Netwon Raphson method				
19	Aman Kumar	224103404	Aditya Subhasis Samal	224103402	Exhuastive search method	Biesection method				
20	Ankit Chaudhary	224103405	Christo Elias	224103308	Exhuastive search method	Secant method				
21	Sanket	190103083	Arnav Sahu	190103018	Bounding phase method	Interval halving method				
22	Durgansh Mishra	190103036	Abhinav Verma	190103003	Bounding phase method	Golden section search method				
23	shubham ahirwar	224363001	Usmaan	224363008	Exhuastive search method	Netwon Raphson method				
24	Sahaj Sethi	190103078	Kapil	190103048	Bounding phase method	Biesection method				
25	Ritu Patil	190103066	Nikhil Upadhyay	190103116	Bounding phase method	Secant method				
26	Tushar Bajaj	190103111	Sankalp Agrawal	190103082	Bounding phase method	Interval halving method				
27	Richa Kumari	190103074	Anushka Anand	190103016	Bounding phase method	Golden section search method				
28	Akshita Bhatt	190103008	Khairnar Sanket Narendra	190103050	Bounding phase method	Netwon Raphson method				
29	Soham Karandikar	190103097	Kanbaskar Prathamesh	190103046	Bounding phase method	Biesection method				
30	Shivam Panwar	180103070	Ayush Jha	190102099	Bounding phase method	Secant method				

Programming Phase # 1

1. Maximize
   $f(x) = (2x-5)^4 - (x^2-1)^3$ in interval (-10, 0)
2. Maximize
   $f(x) = 8 + x^3 - 2x - 2e^x$ in interval (-2, 1)
3. Maximize
   $f(x) = 4x(\sin x)$ in interval (0.5, π)
4. Minimize
   $f(x) = 2(x-3)^2 + e^{0.5x^2}$ in interval (-2, 3)
5. Minimize
   $f(x) = x^2 - 10e^{(0.1x)}$ in interval (-6, 6)
6. Maximize
   $f(x) = 20\sin x - 15x^2$ in interval (-4, 4)

   The bounds are given to you so that you can choose the initial guess for the bounding phase method accordingly.

Guidelines

1. There is only one file of your program.
2. Program should be written as sub-routines for examples

   Main program()

   Ask input: a,b, etc,

   Call bracketing method and pass inputs a, b, etc, and store the new ranges as x,y, etc.

   Call region-elimination or gradient-based method with new ranges as x,y, etc,

   Save results iteration wise

   Bracketing method()

   region-elimination or gradient-based method()

   objective function()

   other_functions()

3. Change input and tabulate results
4. Plots results
5. Conclude your Phase-1