

## University of Hargeisa

#### College of Computing and IT

## Department of Computer Science

# Assignment (15%)

# **Design and Analysis of Algorithms**

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# **Assignment Instructions:**

You are tasked with a critical assignment that requires careful research, analysis, and detailed documentation. Below are the instructions and guidelines to ensure the quality and professionalism of your submission:

#### Instructions:

#### 1. Research and Literature Review:

Gather a sufficient number of relevant reference materials and review them in detail.

## 2. Document Preparation:

Your written document must include the following sections:

- I. Introduction: Provide an overview of your chosen topic, setting the context for your review.
- II. Detailed Literature Review: Summarize and analyze the reference materials related to your topic.
- III. Critique: A Critical Review:

Highlight the strengths and weaknesses of the reviewed literature.

IV. The Algorithm and Its Pseudocode: Explain the key algorithm related to your topic and provide its pseudocode.

V. Complexity Analysis and Discussion: Analyze the algorithm's computational complexity and discuss its efficiency.

VI. Conclusion: Summarize your findings and provide insights or recommendations based on your review.

VII. References: Provide a complete list of all the references cited in your work, formatted according to IEEE style.

# 3. Writing Style and Format:

 Write the Introduction, Critique, Analysis, and Conclusion sections in your own words to demonstrate your understanding.

 Include a full citation of the referenced article at the top of each page below the heading.

Be concise and avoid unnecessary or superfluous information.

# 4. Formatting Guidelines:

I. Font: Times New Roman

II. Font Size: 12

III. Font Color: Black

IV. Line Spacing: 1.5

V. Alignment: Full justification

VI. References: Use IEEE format

This assignment is critical and demands a high level of academic rigor. Ensure your work is well-structured, clear, and adheres to the provided guidelines.

All assignments must be submitted on or before **February 5**<sup>th</sup> **2025** via my official email: suleiman.gargaare@uoh.edu.so Please ensure your submission adheres to the provided guidelines and is sent on time.

Best of luck, and I look forward to reviewing your submissions!

4D - Grouping with their Titles				
1	Abdirahman Hassan Aden Esse			
2	Abdirahman Mohamed Abdi	Group 1		
3	Abdisamed Aden Abdi Jama	_		
4	Abdiwahab Yousuf Mursal Ahmed	Shell Sort		
5	Amiin Axmed Siciid Caqli			
6	Amiin Fu-Aad Ibraahim			
7	Amran Cabdi Muuse Cabdilaahi			
1	Axmed Maxamuud Muuse Jibriil			
2	Bilan Musa Hussein			
3	Cabdale Cali Cismaan	Group 2		
4	Cabdilaahi Khadar Yoonis Axmed	_		
	Cabdiraxmaan Cali Maxamed Kahin	Heap Sort		
6	Cabdiraxmaan Siciid Cali Cabdilaahi			
7				
	Cabdirisaaq Cali Xasan Cawaale			
1	Cabdishakuur Maxamed Jaamac			
2	Cadnaan Cabdiraxamaan Cawil	Canada 2		
3	Canab Maxamed Cilmi Ibraahim	Group 3		
4	Cumar Maxamuud Axmed Sh.Nuur	C 1 C 1		
5	Guleed Cabdiqaadir Aadan Maxamed	Cycle Sort		
6	Hibaaq Siciid Ismaaciil Cubili			
7	Hibo Saleebaan Cumar Axmed			
1	Hodan Cali Aw.Yuusuf			
2	Hoodo Ismaaciil Ibraahim Caabi	Group 5		
3	Hoodo Xasan Cabdi Cismaan			

4	Ishwaaq Cabdisalaan Xasan Aadan	san Aadan	
5	Ismaaciil Saleebaan Cali Warsame	Tim Sort	
6	Khadar Faysal Xassan		
7	Mahad Ali Abdi Ahmed		
1	Maxamuud Axmed Cali Jire		
2	Mohamed-amin Osman Ahmed	Group 6	
3	Mohamoud Abdi Hussein Adib		
4	Mubaarig Cabdilaahi Oomar Aadan	Bogo Sort	
5	Mumtaas Cali Xasan		
6	Mustafe Ali Yusuf	-	
7	Nagiib Cali Yuusuf Ibraahim		
1	Nimcan Abdi Muhumed		
2	Raxma Maxamed Siciid Cumar	Group 7	
3	Rooda Cismaan Xirsi		
4	Sakariye Maxamed Saleebaan Amiin	Comb Sort	
5	Salma Cabdirisaaq Saleebaan Axmed		
6	Sharmarke Fuad Abdi		
7	Mohamed Khadar Abdi Jama		
1	Sidiiq Sacad Ismaaciil Siciid		
2	Suhayb Cabdiraxamaan Cumar Maxamed	Group 8	
3	Suldan Sahardid Ahmed		
4	Sundus Cabdirisaaq Cabdilaahi Cilmi	Intro Sort	
5	Xafsa Cabdilaahi Xasan Faarax	_	
6	Xasan Maxamuud Ismaaciil Muxumed		

# PRESENTATION SCHEDULE OF THE ASSIGNMENT

The schedule of the presentation will be:

<b>Group Name</b>	Time	Date		
Group 1	16:30 – 16:45	Thursday 6 <sup>th</sup> Feb, 2025		
Group 2	16:45 – 17:00	Thursday 6 <sup>th</sup> Feb, 2025		
Group 3	17:15 – 17:20	Thursday 6 <sup>th</sup> Feb, 2025		
Group 4	17:20 – 17:35	Thursday 6 <sup>th</sup> Feb, 2025		
Group 5	17:35 – 18:00	Thursday 6 <sup>th</sup> Feb, 2025		
Break				
Group 6	18:30 – 18:45	Thursday 6 <sup>th</sup> Feb, 2025		
Group 7	18:45 – 19:00	Thursday 6 <sup>th</sup> Feb, 2025		

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**Note**: The lecturer will select the presenters from each group on the day of the presentation. The remaining group members will be responsible for answering questions related to their specific topic.