Försättsblad Prov Original

Kurskod						Provkod				Tentamensdatum								
D	T	1	4	9	G	T	1	0	5	2	0	2	4	-	0	6	-	0 5

Kursnamn	Datateknik GR (B), Administration av UNIX-lika system
Provnamn	Skriftlig tentamen
Ort	Sundsvall
Termin	
Ämne	

i

Instructions

Carefully read the questions before you start answering them. Note the time limit of the exam and plan your answers accordingly. Only answer the question. The questions are not sorted by difficulty. Clearly show which answer you are giving your solution to. Always motivate your answers and show your calculations.

If you want to attach something handwritten as a supplement to your answers, it is possible to write it on a special scanning paper. There is a unique seven-digit code under each question, it should be noted in the upper left corner of the pass-scan paper. Each number must also fill in the corresponding circle below the code. Use blue, black ink pen or pencil. There is scratch paper in the hall if needed.

- **Time** 5 hours.
- **Exam Aids** Dictionary, Pen and Paper
- **Maximum points** 30
- **Questions** 10

Preliminary grades

The following grading criteria applies:

E ≥ 30%, D ≥ 45%, C ≥ 60%, B ≥ 75%, A ≥ 90%.

Scoring will be based on level of depth shown in your answer. **To pass this exam you must have shown proficient knowledge in all the intended learning outcomes (ILO) covered in this exam.**
Each questions ILO affiliation is shown as (ILO: #). The grade limit given is preliminary per ILO. Final grade is set based on your performance on each individual ILO.

Covered ILO

This exam covers the following Intended Learning Outcomes (ILO)

- ILO: 1 – Administer and modify a UNIX-like system and its services
- ILO: 2 – Identify, implement and motivate choice of services
- ILO: 3 – Describe how the upstart process works in a UNIX-like system

Contact Information

For questions regarding the exam
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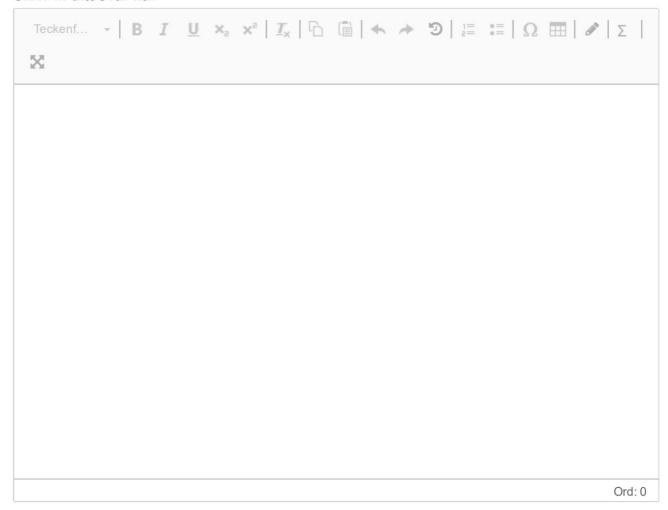
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or call service center at 010-142 80 00

1 (ILO: 1) What information can you get from the following:

```
brw-rw----  1  root  disk  8,  0  okt 12 08:18  sda
crw-rw-rw-  1  root  tty   5,  0  okt 12 08:08  tty
```

What type of files are shown? What is the difference between them?
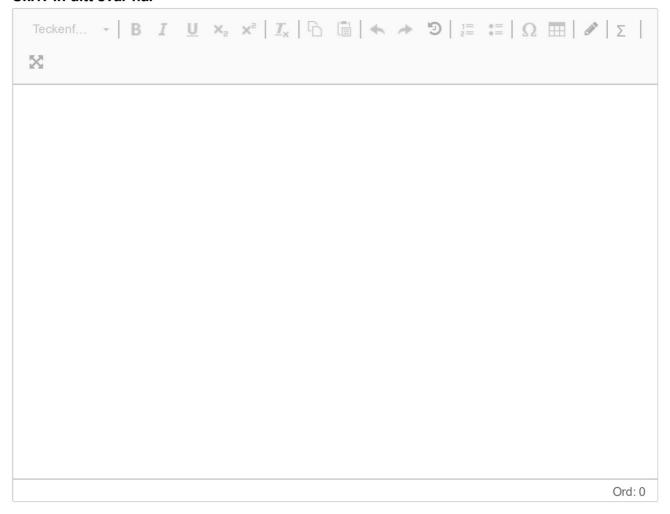
Skriv in ditt svar här

Teckenf… ▾ | **B** *I* U x₂ x² | Iₓ | ⎙ ⎙ | ⬅ ➡ ↺ | ⅓≡ ≔ | Ω ⊞ | ✏ | Σ |

✕

Ord: 0

Totalpoäng: 3

Bifoga ritning till ditt svar?
Använd följande kod:

✗ ✗ ✗ ✗ ✗ ✗ ✗

2 (ILO: 1) I want to run a process every Wednesday at 3 am all year around.

Give a UNIX-way solution for this to happen. Explain how your solution works.

Skriv in ditt svar här

Teckenf… | **B** *I* U x₂ x² | Iₓ | ▢ ▢ | ◀ ▶ ⟲ | ≔ ≔ | Ω ▦ | ✎ | Σ |

Ord: 0

Totalpoäng: 3

Bifoga ritning till ditt svar?
Använd följande kod:

X X X X X X

3 (ILO: 1) What UMASK values must be set to give the following default permission. Show your calculations.

1. 755
2. 500
3. 110

Skriv in ditt svar här

Teckenf…	B	I	U	x₂	x²								Ω			Σ	

Ord: 0

Totalpoäng: 3

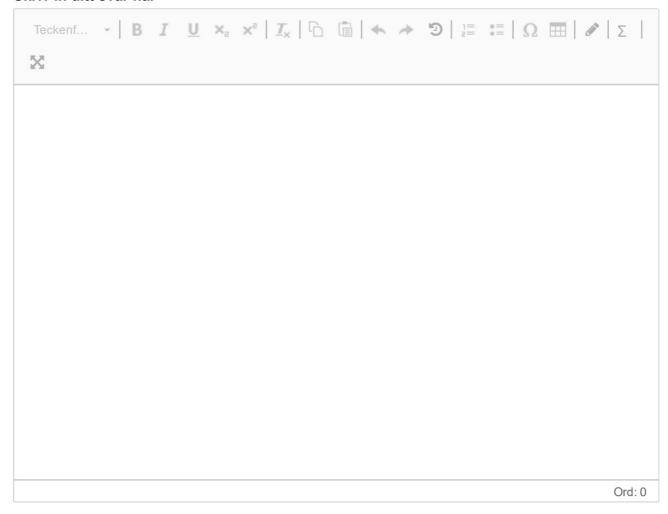**Bifoga ritning till ditt svar?**
Använd följande kod:

X X X X X X X

4 (ILO: 1) What is the difference between loading a driver as a module, and building it directly into the kernel?

Reason between the positive and negative parts of both methods of adding a driver.

Skriv in ditt svar här

Teckenf... ▾	B	I	U	x₂	x²	Iₓ	🗐	📋	↶	↷	�“	≟	≔	Ω	⊞	✎	Σ	

Ord: 0

Totalpoäng: 3

Bifoga ritning till ditt svar?
Använd följande kod:

X X X X X X X

5 (ILO: 2) Name and explain all the resource records needed for properly running a mail server in your domain. Including reducing the risk of someone spoofing your domain.

Skriv in ditt svar här

| Teckenf... ▾ | **B** *I* <u>U</u> x₂ x² | Iₓ | 🗐 📋 | ↩ ↪ 🕐 | ≔ ≔ | Ω ▦ | ✎ | Σ | |

Ord: 0

Totalpoäng: 3

Bifoga ritning till ditt svar?
Använd följande kod:

X X X X X X X

6 (ILO: 2) Show all the steps necessary to share a folder that a windows computer can access iff they have an account on your system.

Skriv in ditt svar här

Ord: 0

Totalpoäng: 3

Bifoga ritning till ditt svar?
Använd följande kod:

X X X X X X

7 (ILO: 2) Motivate why it is necessary to reverse the order for the IP-address when setting up reversed DNS. Discuss the scenario where an organisation might not have a full /24 subnet.
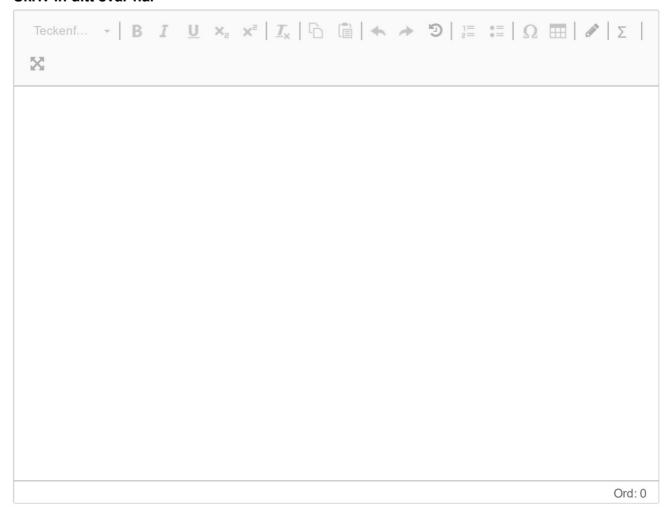
Skriv in ditt svar här

| Teckenf... ▾ | **B** *I* U x₂ x² I_x | 🗐 📋 | ↩ ↪ 🕥 | ≔ ≔ | Ω ▦ | ✎ | Σ | |

Ord: 0

Totalpoäng: 3

Bifoga ritning till ditt svar?
Använd följande kod:

X X X X X X X

8 (ILO: 3) I can see something called "load average" when checking performance and settings in my computer system:

- What's the use of that information?
- Why is it three values and what's the meaning of them because they seem to be different?
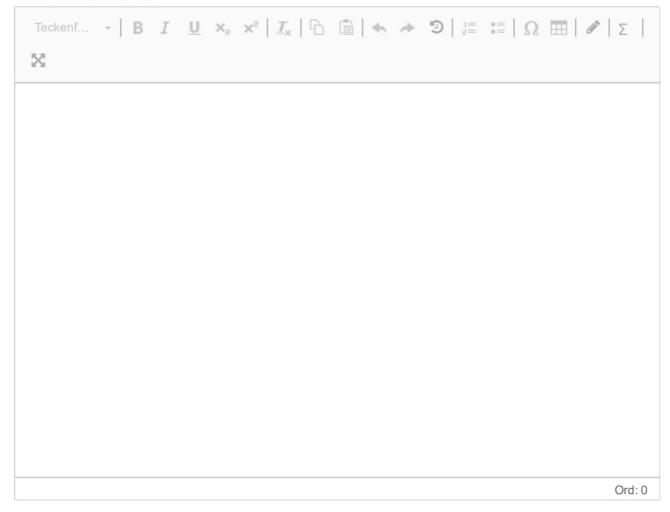
Skriv in ditt svar här

Teckenf... ▾ | **B** *I* U x₂ x² | Iₓ | ▢ ▢ | ↩ ↪ ↺ | ≔ ≔ | Ω ▦ | ✎ | Σ

Ord: 0

Totalpoäng: 3

Bifoga ritning till ditt svar?
Använd följande kod:

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9 (ILO: 3) In one of the laboratory assignments in this course, you experimented with different ways of running a script from the terminal.

Compare the different methods, give examples of the syntax used and what it do, and explain when each method is useful, in comparison to the others.

Skriv in ditt svar här

Teckenf…   B I U x₂ x² Iₓ   ⟲ ⟳ ⟲   Ω ☰   Σ

Ord: 0

Totalpoäng: 3

Bifoga ritning till ditt svar?
Använd följande kod:

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10   (ILO: 3) Explain the functions and responsibilities of the following components:

- Grub
- Kernel
- Shell
- GUI

Skriv in ditt svar här

Teckenf… ▾	B	I	U	X₂	X²	Iₓ	⎘	⎙	←	→	↺	⅒	☰	Ω	⊞	✎

Σ | ⤢

Ord: 0

Totalpoäng: 3

Bifoga ritning till ditt svar?
Använd följande kod:

X X X X X X X