- When was 'sed' created? Who created 'sed'?

Sed was created by Lee Mcahon in 1973

- What is 'sed' based on? What does 'sed' stand for?

Sed is based on the ed editor, created by Ken thompson in 1969. Sed stands for “stream editor”

- How does sed work? What is the process that occurs when sed is run and an input file is given?

Sed

- What is the 'pattern space'? What is the 'hold space'? How are they different?

The pattern space is a buffer where sed commands read each input line one at a time and runs one or more sed commands on. The hold space is for long-term storage, keeping its data between cycles, so sed can reuse it later.

- What general format do 'sed' instructions follow? What information is used/required?

sed ‘[command]/[address]/[pattern]]/[replacement]’ <filename>

- Discuss the 'address' portion of a 'sed' instruction.

The address portion of a sed instructions identifies which lines of a file sed should make substitutions on. Line numbers and regex can be used to specify an address.

- Give a non-regex example for 'address'

4
sed ‘4d’ file.txt //delete line 4

- Give a regex example for 'address

‘address’
sed ‘address/d’ file.txt //delete lines with address

- Discuss the 'command' portion of a 'sed' instruction

Sed commands have single-letter names. They’re typically used as [address][command][options], with different commands requiring different options and a command operating on every matching address.

- How are append, change, and insert commands represented in 'sed'?

a *text*
c *text*
i *text*

What are the differences between append, change, and insert?
Append will append text after normal output. Change will change the normal output to text and not keep the original output. Insert is similar to append, but inserts text before normal output.

What do the following commands do?
d - deletes the pattern space
h - copies the pattern space to the hold space
p - prints the pattern space
s - substitutes a specified regex with a replacement
q - prints the pattern space and quits without processing remaining lines
y - replaces given characters with others (transliterates)