

Exchange shifts



Exchange shifts are those where the fingers 'cross over' during the shift, e.g. shifting from 2-1 in an ascending shift, or 1-2 in a descending shift.

One way to play descending exchange shifts is to use substitutions. (Substitutions are shifts where one finger replaces another on the same note.) As the note in brackets shows in the example above, play an 'intermediate note' between the two notes of the actual shift. Shift to this intermediate note with the finger that plays the beginning note of the shift (in this case the first finger), and then substitute the finger that plays the ending note of the shift (the second finger).

Intermediate note exercise

In this exercise, intermediate notes are written in as actual notes to be played. Every quaver is an intermediate note between the first and third notes of each bar.

Play the exercise entirely on the A string.

Exchange shifts with separate bows: shift with the 'old' finger on the 'old' bow, and play the 'new' finger on the 'new' bow. This has been written in to the exercise with the bowings in Nos. 2, 4 and 6.

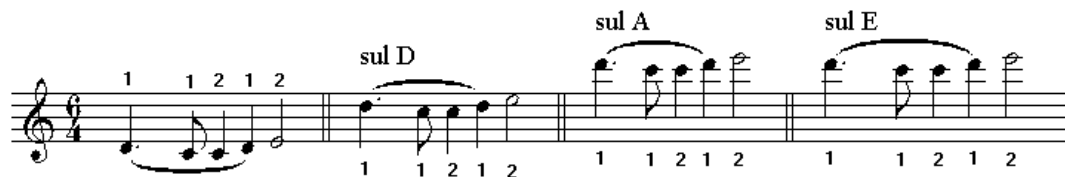
1 First play through a section as written above. Shift to the quaver slowly, with a heavy glissando.

2 Then repeat the section, playing the quaver as a grace note.

3 Gradually play the grace note shorter and shorter, until it becomes inaudible.

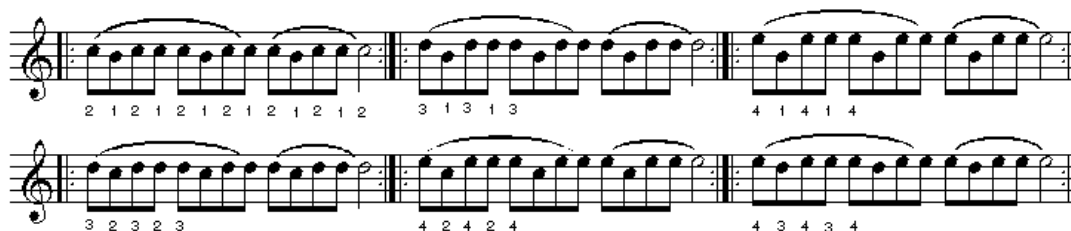
Other positions

Play the same notes on the other strings, starting in different positions:



Substitutions exercise

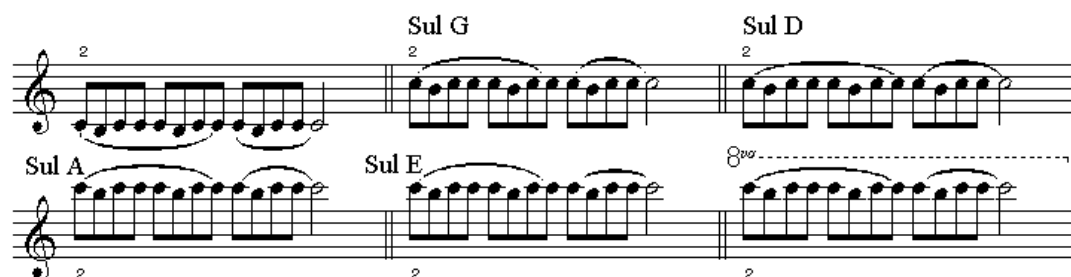
Regularly practising substitutions is a simple way to improve both exchange shifts and other types of shift as well. The following warm-up exercise covers all the possibilities in one short, logical sequence.



- Keep the lower of the two fingers lightly down on the string, without lifting them off during the shifts.
- Play *forte*, keeping the bow sustained without lightening it before each substitution.
- Move the fingers quickly, making the shifts as inaudible as possible.

Other positions

Play the same notes on the other strings, starting in different positions:



Alternative

As well as slurring two bows to a bar, also play fast spiccato or sautillé, four strokes to a note. The shifts must be very fast to co-ordinate with the bow, so that it sounds the same as if played with one finger throughout.

