**a)**

**Code**

load handel;  
x=y;  
sound(z,Fs);

**Explaination**

First the 'load handel' is used to load the handel waveform and it is by default stored in y. Then we copy it to x and play it using sound command at Fs sampling.

**b)**

**Code**

load handel;  
x=y;  
for i=1:length(x)/2  
    w(i)=x((2\*i)-1);  
end  
sound(w,Fs/2);

**Explaination**

First the 'load handel' is used to load the handel waveform and it is by default stored in y. Then we copy it to x . Then every second sample of x is stored in w (starting from 1,3,5,....) using the 'for' loop. w is played at Fs/2 samples.

**c)**

**Code**

load handel;  
x=y;  
for j=1:(length(x))/4  
    z(j)=x((4\*j)-3);  
end  
sound(z,Fs/4);

**Explaination**

First the 'load handel' is used to load the handel waveform and it is by default stored in y. Then we copy it to x . Then every fourth sample of x is stored in w (starting from 1,5,9,....) using the 'for' loop. w is played at Fs/4 samples.

**d)**

**Code**

load handel;  
x=y;  
for j=1:(length(x))/4  
    z(j)=x((4\*j)-3);  
end  
audiowrite('part(c).wav',y,Fs/4);

**Explaination**

First the 'load handel' is used to load the handel waveform and it is by default stored in y. Then we copy it to x . Then every fourth sample of x is stored in w () using the 'for' loop. w is saved at Fs/4 samples. (**NOTE: The 'wavwrite' function in matlab is replaced by 'audiowrite'. The same syntax in wavwrite would have been:**

**wavwrite('part(c).wav',y,Fs/4);**

)

**General Conclusion:**As the number of samples decrese the sound has added noise and lacks clarity due to missing tones.

**PLEASE RATE**