This ECG was recorded from a 20-year-old student who complained of an irregular heartbeat. Apart from an irregular pulse, her heart was clinically normal. What do the ECG and chest X-ray show and what would you do?
ANSWER 1

The ECG shows:
- Sinus rhythm, rate 100 bpm
- Ventricular extrasystoles
- Normal axis
- Normal QRS complexes and T waves

The chest X-ray is normal.

Clinical interpretation
The extrasystoles are fairly frequent, but the ECG is otherwise normal.

What to do
Ventricular extrasystoles are very common. In large groups of people, there is a correlation between the presence of extrasystoles and heart disease of many types. However, in young people who are otherwise asymptomatic and whose hearts are otherwise normal, the chances of a significant cardiac problem are very low.

Occasional extrasystoles in this context do not require investigations. With more frequent extrasystoles, an echocardiogram to confirm a structurally normal heart provides additional reassurance. Specific treatment is not usually required beyond avoidance of alcohol and caffeine.

SUMMARY
Sinus rhythm with ventricular extrasystoles.

See ECG Made Easy, 9th edition, Chapter 4