$\lim_{n\to\infty}\frac{\sum_{i=1}^{n}i^2}{n^3}=\lim_{n\to\infty}\frac{\sum_{i=1}^{n}i^2-\sum_{i=1}^{n-1}i^2}{n^3-(n-1)^3}=\lim_{n\to\infty}\frac{n^2}{n^3-(n^3-3n^2+3n-1)}=\lim_{n\to\infty}\frac{n^3}{3n^2-3n+1}=\frac{1}{3}$

故$f(n)=\sum_{i=1}^{n}$是$\Theta(n)$