$$\sum_{1}^{n}\left[(2i+1)^2-(2i)^2\right] \Rightarrow \sum_{1}^{n}\left[(4i^2+4i+1)-4i^2\right] \Rightarrow \sum_{1}^{n}(4i+1) \Rightarrow$$

$$4\sum_{1}^{n} i + \sum_{1}^{n} 1 \Rightarrow \sum_{1}^{n}\left[(2i+1)^2-(2i)^2\right] = 4.\frac{n^2+n}{2} + n = \boxed{2n^2+3n}$$

$$S_n = 2n^2+3n \Rightarrow 2.0^2+3.0 = \boxed{0}$$

$$S_n = 2n^2+3n \Rightarrow 2.1^2+3.1 = \boxed{5}$$

$$S_n = S_{n-1} + a_n \Rightarrow 2(n-1)^2+3(n-1)+(4n+1) \Rightarrow$$

$$S_n = 2(n^2-2n+1)+(3n-3)+(4n+1) \Rightarrow (2n^2-4n+2)+(3n-3)+(4n+1)$$

$$S_n = \boxed{2n^2+3n}$$