911.

$$V = \iint_D (x - x^2 - y^2)\,dxdy = \iint_D \left(\frac{1}{4} - (x - \frac{1}{2})^2 - y^2\right)dxdy$$

$$D = \left\{(x,y): \frac{1}{4} - (x - \frac{1}{2})^2 - y^2 \geq 0\right\} = \left\{(x,y): (x - \frac{1}{2})^2 + y^2 \leq \frac{1}{4}\right\}$$

$$V = \int_{x=0}^{1}\left(\int_{y=-\sqrt{x-x^2}}^{\sqrt{x-x^2}} (x - x^2 - y^2)\,dy\right)dx$$

$$\begin{cases} x - \frac{1}{2} = r\cos\theta \\ y = r\sin\theta \end{cases} \quad dxdy = r\,dr\,d\theta, \quad D_{r\theta} = \left\{(r,\theta): 0 \leq r \leq \frac{1}{2},\ 0 \leq \theta \leq 2\pi\right\}$$

$$V = \iint_{D_{r\theta}} \left(\frac{1}{4} - (r\cos\theta)^2 - (r\sin\theta)^2\right) r\,dr\,d\theta$$

$$V = \iint_{D_{r\theta}} \left(\frac{r}{4} - r^3\right) dr\,d\theta = 2\pi \left[\frac{r^2}{8} - \frac{r^4}{4}\right]_{r=0}^{\frac{1}{2}} = 2\pi \cdot \frac{1}{64} = \frac{\pi}{32}$$