4) Select all the courier whose cost is greater than Rs 100 and less than Rs 500 & mode of payment is online.

Relational Algebra:

$\Pi_{<.c\_id,p.p\_amount,p.p\_mode>}(p,(\sigma_{<p.p\_amount>100 \text{ AND } p.p\_amount<500 \; p.p\_mode="online">}\text{payment})\bowtie_{<c.p\_id=p.p\_id>}(c,\text{courier}))$

SQL Code:

SELECT C_ID, P.P_AMOUNT, P.P_Mode FROM COURIER AS C JOIN PAYMENT AS P ON(C.P_ID=P.P_ID) WHERE P.P_AMOUNT<'500' AND P.P_AMOUNT >'100' AND P.P_MODE='ONLINE';

Output:

	c_id character varying (10)	p_amount integer	p_mode character varying (10
1	C001	120	ONLINE
2	C005	140	ONLINE
3	C006	200	ONLINE