Q 1. Write a Python program to calculate $y = \sum_{j=1}^{10} \sum_{i=1}^{10} i \times j$

Q 2. Below are three tables used in a firm.

Project number

projno	projname	deptno	respemp	
AD3100	ADMIN SERVICES	D01	000010	
IF1000	QUERY SERVICES	C01	000030	
IF2000	USER EDUCATION	E01	000030	
MA2100	WELD LINE AUTOMATION	D01	000010	
PL2100	WELD LINE PLANNING	B01	000020	

Employee numbers

empno	lastname	workdept
00010	HASS	A00
00020	THOMPSON	B01
00030	KWAN	C01
00110	LUCCHESSI	A00
00120	OCONNELL	A00
00130	QUINTANA	C01

Department No

deptno	deptname	mgrno
A00	Spiffy COMPUTER SERVICE DIV.	000010
B01	PLANNING	000020

C01	INFORMATION CENTER	000030
D01	DEVELOPMENT CENTER	

Answer the following questions, respectively.

- Write one statement in Python to perform a left join on Table *project* and Table *department* according to deptno;
- Write one statement in Python to perform a right join on Table *project* and Table *department* according to deptno;
- Write one statement in Python to perform an inner join on Table *project* and Table *department* according to deptno;
- Write one statement in Python to perform a full join on Table *project* and Table *department* according to deptno;
- replace *empno* in employee to *mgrn*o, replace *project* with *employee*, replace *deptno* with *mgrno* in the above questions, and then repeat the above joins.