SQL Query Problem Using Pivot IN MsSQL server

Problem Statement

Write a query to generate a employee salary report using salary, income and deduction tables using Pivot

Results | **Messages**

	emp_id	emp_name	base_salary
1	1	Rohan	5000
2	2	Alex	6000
3	3	Maryam	7000

	id	income	percentage
1	1	Basic	100
2	2	Allowance	4
3	3	Others	6

	id	deduction	percentage
1	1	Insurance	5
2	2	Health	6
3	3	House	4

	emp_id	emp_name	trns_type	amount
1	1	Rohan	Allowance	200
2	2	Alex	Allowance	240
3	3	Maryam	Allowance	280
4	1	Rohan	Basic	5000
5	2	Alex	Basic	6000
6	3	Maryam	Basic	7000
7	1	Rohan	Health	300
8	2	Alex	Health	360
9	3	Maryam	Health	420
10	1	Rohan	House	200
11	2	Alex	House	240
12	3	Maryam	House	280

SQL Query STATEMENT

```sql
select
    emp_id,
    emp_name,
    trns_type,
    case when trns_type='Allowance' then round(base_salary*(percentage/100),1)
        when trns_type='Basic' then round(base_salary*(percentage/100),1)
         when trns_type='Others' then round(base_salary*(percentage/100),1)
         when trns_type='House' then round(base_salary*(percentage/100),1)
         when trns_type='Health' then round(base_salary*(percentage/100),1)
        when trns_type='Insurance' then round(base_salary*(percentage/100),1)
    end as amount
from salary
cross join(select income as trns_type,cast(percentage as decimal) as percentage from income
            union
            select deduction as trns_type,cast(percentage as decimal) as percentage from deduction) a;
```

Output

	emp_id	emp_name	tms_type	amount
1	1	Rohan	Allowance	200.000000
2	2	Alex	Allowance	240.000000
3	3	Maryam	Allowance	280.000000
4	1	Rohan	Basic	5000.000000
5	2	Alex	Basic	6000.000000
6	3	Maryam	Basic	7000.000000
7	1	Rohan	Health	300.000000
8	2	Alex	Health	360.000000
9	3	Maryam	Health	420.000000
10	1	Rohan	House	200.000000
11	2	Alex	House	240.000000
12	3	Maryam	House	280.000000
13	1	Rohan	Insurance	250.000000
14	2	Alex	Insurance	300.000000
15	3	Maryam	Insurance	350.000000
16	1	Rohan	Others	300.000000
17	2	Alex	Others	360.000000
18	3	Maryam	Others	420.000000

SQL QUERY STATEMENT USING PIVOT

```sql
]select   emp_name as employe
,  basic,allowance,others
,(basic + allowance +others) as gross
,insurance, health, house,
(insurance + health +house) as total_deductions
,(basic+allowance+others)-(insurance + health +house) as net_pay
from
(
    select emp_name, trns_type, amount
    from emp_transaction
    ) s

pivot
    (
    sum(amount)
    for trns_type in ([allowance],[Basic],[others],[Insurance],[Health],[House])
    )g;
```

Using PIVOT for converting row to columns

	employe	basic	allowance	others	gross	insurance	health	house	total_deductions	net_pay
1	Alex	6000	240	360	6600	300	360	240	900	5700
2	Maryam	7000	280	420	7700	350	420	280	1050	6650
3	Rohan	5000	200	300	5500	250	300	200	750	4750

THANK YOU