PF -LAB-3-ASSIGNMENTS

Q-1

```c
#include <stdio.h>
int  main() {
    int testinteger = 3000000000;
    printf("Number is %i", testinteger);
}
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-3>gcc Q-1.c -o Q-1.exe

D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-3>Q-1.exe
Number is -1294967296
D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-3>
```
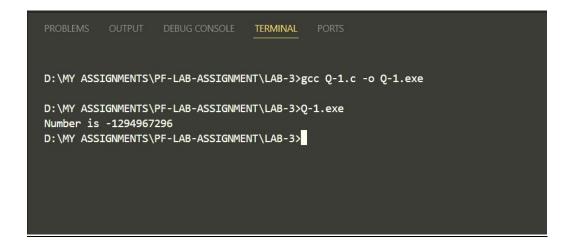
Ans: Because integer datatype can only store value up to 2147483647, & output is greater than that.

Q-2

```c
#include <stdio.h>
int main() {
    int a, b, c;
    printf("Enter num1:");
    scanf("%d", &a);
    printf("\nEnter num2:");
    scanf("%d",&b);
    c=a;
    a=b;
    b=c;
    printf("Number1 is:%d\nNumber2 is:%d",a ,b);
    return 0;
}
```

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS


D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-3>gcc Q-2.c -o Q-2.exe

D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-3>Q-2.exe
Enter num1:150

Enter num2:20
Number1 is:20
Number2 is:150
D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-3>
```

Q-3

```c
#include <stdio.h>
int main () {
    float  taxRate, salary, tax, income;
    printf("Enter taxrate:");
    scanf("%f", &taxRate);
    printf("Enter Salary:");
    scanf("%f", &salary);
    tax = (taxRate * salary) / 100;
    income = salary - tax;
    printf("Tax is:%.2f \nYour income is:%.2f", tax, income);
    return 0;
}
```

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS


D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-3>gcc Q-3.c -o Q-3.exe

D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-3>Q-3.exe
Enter taxrate:7
Enter Salary:450000
Tax is:31500.00
Your income is:418500.00
D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-3>
```

Q-4

```c
#include <stdio.h>
int main() {
    int dist = 1207, fuelPrice1 = 118, fuelPrice2 = 123, average, fuelConsumed1Way, totalFuelConsumed,
    totalCost, cost_forward, cost_return;
    printf("Enter vehicle's fuel average:");
    scanf("%d", &average);
    if (average <= 0) {
        printf("Fuel average should be positive. Enter again.");
    }

    fuelConsumed1Way = dist / average;
    cost_forward = fuelConsumed1Way * fuelPrice1;
    cost_return = fuelConsumed1Way * fuelPrice2;
    totalFuelConsumed = 2 * fuelConsumed1Way;
    totalCost = cost_forward + cost_return;

    printf("Total Fuel Cost = %d \nTotal Fuel Consumed = %d", totalCost, totalFuelConsumed);
}
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-3>gcc Q-4.c -o Q-4.exe

D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-3>Q-4.exe
Enter vehicle's fuel average:15
Total Fuel Cost = 19280
Total Fuel Consumed = 160
D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-3>
```

Q-5

```c
#include <stdio.h>
int main() {
    int principal, interestRate, timePeriod, interest;
    printf("Enter Principal:"); //Principal must be between 100 Rs. to 1,000,000 Rs
    scanf("%d", &principal);
    printf("\nEnter Rate of Interest:"); //Interest rate must be between 5% to 10%
    scanf("%d", &interestRate);
    printf("\nEnter Time Period:"); //Time period must be between 1 to 10 years
    scanf("%d", &timePeriod);

    interest = (principal * interestRate * timePeriod) / 100;

    printf("Total Interest is:%d", interest);
    return 0;
}
```

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS


D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-3>gcc Q-5.c -o Q-5.exe

D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-3>Q-5.exe
Enter Principal:350000

Enter Rate of Interest:14

Enter Time Period:2
Total Interest is:98000
D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-3>
```

Q-6

```c
#include <stdio.h>
int main() {
    int x1 = 5, y1 = 4, x2 = 3, y2 = 2;
    float Slope;
    Slope = (y2 - y1) / (x2 - x1);
    printf("Slope = %.3f", Slope);
    return 0;

}
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-3>gcc Q-6.c -o Q-6.exe

D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-3>Q-6.exe
Slope = 1.000
D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-3>
```