Exercise 01

```c
#include<stdio.h>

    // MADE BY D B YESEN BINUWARA [ IT23184558 ]

    #define g 9.8 // g = Gravitational Constant
    #define Mega 1000000
    #define Efficiency 9.80

int main() {

    float height,flowrate,mass,work,power;

    printf("Enter the height of the dam (Meters):");
    scanf("%f",&height);

    printf("\nEnter the flow rate (Cubic Meters Per Second):");
    scanf("%f",&flowrate);

    mass = flowrate * 1000;
    work = mass* g * height;
    power = (work * Efficiency)/Mega;

    printf("\nThe power generated is %.2fMW",power);

    return 0;
}
```

Exercise 02

```c
#include<stdio.h>

int main() {

    // MADE BY D B YESEN BINUWARA [ IT23184558 ]

    float takeoffspeed,speed,distance;
    double time,accn;

    printf("Enter the takeoff speed in KM/H :");
    scanf("%f",&takeoffspeed);

    printf("\nEnter the Distance traveled (Meters) :");
    scanf("%f",&distance);

    speed = (takeoffspeed*1000)/3600;
    time = (2*distance)/speed;
    accn = speed/time;

    printf("\nThe Acceleration is %f ms^(-2)",accn);
    printf("\nThe Time is %f seconds",time);

    return 0;
}
```

Exercise 03

```c
#include<stdio.h>

// MADE BY D B YESEN BINUWARA [ IT23184558 ]

int main() {

    float infused_vol, infused_time, infused_rate;

    printf("Enter the volume to be infused (ml):");
    scanf("%f",&infused_vol);

    printf("\nEnter the time taken to infuse (minutes):");
    scanf("%f",&infused_time);

    infused_rate = (infused_vol)/(infused_time/60);

    printf("VTBI : %fml", infused_vol);
    ptrintf("\nRate : %fml/hr", infused_rate);

    return 0;

}
```

Exercise 04

```c
#include<stdio.h>

// MADE BY D B YESEN BINUWARA [ IT23184558 ]

int main() {

    float population, NoOfToilets, oldLitresPerDay, newLitresPerDay, litresSaved,
installationCost,pricePerLitre, costSaved;

    printf("Enter the population: ");
    scanf("%f", &population);

    printf("\nEnter price of a water litre in Rs: ");
    scanf("%f", &pricePerLitre);

    NoOfToilets = population / 3;
    installationCost = NoOfToilets * 150;
    oldLitresPerDay = 15 * 14 * NoOfToilets;
    newLitresPerDay = 2 * 14 * NoOfToilets;
    litresSaved = oldLitresPerDay - newLitresPerDay;

    printf("\nLitres saved per day: %.2f litres\n", litresSaved);

    costSaved = (oldLitresPerDay * pricePerLitre) - (newLitresPerDay - pricePerLitre);

    printf("\nCost saved per day: Rs %.2f\n", costSaved);

    return 0;

}
```