1. A car rental company charges 20 taka for every kilometre of travel. (It charges full 20 taka for any

fractional km). It also charges 2 taka for every minute of waiting. Write a C program which can input a

fractional number indicating distance travel and an integer number indicating waiting time in minutes.

Display the total bill for that ride.

#include<math.h>

#include<stdio.h>

int main(){

int y, z, t;

float x,p;

printf("enter the distance travel:");

scanf("%f",&x);

printf("enter the waiting time:");

scanf("%d",&y);

p=ceil(x)\*20.0;

z=(y\*2);

t=(p+z);

printf("%d total bill",t);

return 0;

}

2. Nusaiba is child who just learn to crawl. However, she cannot crawl continuously a large distance.

After every 3 feet of crawling, she needs to rest for a while. Write a C program which input distance of

Nusaiba’s crawling and display number of times she takes rest to crawl this distance.

#include<math.h>

#include<stdio.h>

int main(){

int m, n;

printf("enter the distance of Nusaiba’s crawling:");

scanf("%d",&m);

n=((m-1)/3);

printf("number of times she takes rest to crawl this distance is %d ",n);

return 0; }

3. You have bought a large number of cubic shape marbles and want to store them in a cube shape

box. Write a C program which can input length marbles and also length of the box and display how

many marbles can be stored in that box.

#include<stdio.h>

int main(){

int x, y, z;

printf("enter the length of the marble:");

scanf("%d",&x);

printf("enter the length of the box:");

scanf("%d",&y);

z= (y/x)\*(y/x)\*(y/x);

printf("%d total number of marbles",z);

return 0;

}

4. Suppose you purchased a lot of chocolates and want to distribute those with your cousins. You want

to give them as many chocolates as possible but also want to give each one the same number of

chocolates. Write a C program which can input the number of chocolates you bought and number of

cousins you have and display how many chocolates will get by each of your cousin and whether any

chocolates will remain after distribution.

#include<stdio.h>

int main(){

int x, y, z,q;

printf("enter the number of chocolate:");

scanf("%d",&x);

printf("enter the number of cousin:");

scanf("%d",&y);

z=(x/y);

q= (x%y);

printf("each will get %d chocolates\n%d remain chocolate",z,q);

return 0;

}

5. Suppose an elevator can accommodate m number of people and there are n people in the queue.

Write a C program to input integers indicating those m and n and display how many times the

elevator operates to serve all of those people in queue.

#include<math.h>

#include<stdio.h>

int main(){

int m, n,z;

printf("enter the number of people that elevator can accommodate:");

scanf("%d",&m);

printf("enter the number of people in the queue.:");

scanf("%d",&n);

z=ceil((float)n/m);

printf("%d times the elevator operates to serve all of those people in queue.",z);

return 0;}

6. In new COVID protocol in elevator queue every person should maintain a three feet distance from another person. If a corridor in front of the elevator is n feet long then how many people can gather

for the queue. Write an appropriate C program for this.

#include<math.h>

#include<stdio.h>

int main(){

int m, n;

printf("enter the feet of corridor in front of the elevator:");

scanf("%d",&m);

n=(m/3)+1;

printf("%d people can gather for the queue",n);

return 0;

}