

Question 1

```
#include <stdio.h>
#include <stdlib.h>

Int main ()
{
    Int days;
    Int years;
    Int weeks;
    Days =1329;
    Years = day/365;
    Weeks = (Days % 365)/7;
    Days = days - (years* 356) + (weeks *7));
    Printf("Years : %d/n", Years);
    Printf("Weeks : %d/n", Weeks);
    Printf("Days : %d/n", Days);
    Return 0;
}
```

Question 2

```
#include <stdio.h>
#include <math.h>

int main() {
    float x1, y1, x2, y2, gdistance;
    printf("Input x1: ");
    scanf("%f", &x1);
    printf("Input y1: ");
    scanf("%f", &y1);
    printf("Input x2: ");
```

```
scanf("%f", &x2);
printf("Input y2: ");
scanf("%f", &y2);
gdistance = ((x2-x1)*(x2-x1))+((y2-y1)*(y2-y1));
printf("Distance between the said points: %.4f", sqrt(gdistance));
printf("\n");
return 0;
}
```

Question 4

```
#include <stdio.h>

int main()
{
    int age;
    int cnt_baby=0,cnt_school=0,cnt_adult=0;
    int count=0;

    while(count<20)
    {
        printf("Enter age of person [%d]: ",count+1);
        scanf("%d",&age);

        if(age>=0 && age<=4)
            cnt_baby++;
        else if(age>=5 && age<=17)
            cnt_school++;
        else
            cnt_adult++;

        //increase counter
    }
}
```

```
        count++;
    }

    printf("Baby age: %d\n",cnt_baby);
    printf("School age: %d\n",cnt_school);
    printf("Adult age: %d\n",cnt_adult);

    return 0;
}
```

Question 3

```
#include <stdio.h>

int main() {
    float x, y, z, P, A;
    printf("\nInput the first number: ");
    scanf("%f", &x);
    printf("\nInput the second number: ");
    scanf("%f", &y);
    printf("\nInput the third number: ");
    scanf("%f", &z);

    if(x < (y+z) && y < (x+z) && z < (y+x))
    {
        P = x+y+z;
        printf("\nPerimeter = %.1f\n", P);
    }
    else
    {
        printf("Not possible to create a triangle..!");
    }
}
```

```
    }
```

```
}
```

Question 5

```
/*C program to guess a random number.*/
```

```
#include <stdio.h>
```

```
#include <stdlib.h>
```

```
#include <time.h>
```

```
int main()
```

```
{
```

```
    int random_genNo=0,count=0,num;
```

```
    int stime;
```

```
    long ltime;
```

```
    //initialise srand with current time, to get random number on every run
```

```
    ltime = time(NULL);
```

```
    stime = (unsigned) ltime/2;
```

```
    srand(stime);
```

```
    //generate random number
```

```
    random_genNo=rand()%100;
```

```
    //run infinite loop
```

```
    while(1)
```

```
    {
```

```
        //increase counter
```

```
        count+=1;
```

```
//read number from user
printf("\n\nGuess a number from (0 to 100): ");
scanf("%d",&num);

//compare entered number with generated number

if(random_genNo==num){
    printf("Congratulations, you have guessed a correct number.");
    break;
}
else if(random_genNo<num){
    printf("Generated number is less than entered number, try your luck again...");
}
else if(random_genNo>num){
    printf("Generated number is greater than entered number, try your luck again...");
}

if(count==7){
    printf("\n\n### Maximum limit of attempt finished, BAD LUCK !!!\n");
    break;
}
}

return 0;
}
```