

Q1:

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

```
int main()
{
    int total_days=1343;
    int years = (int)(total_days/365);
    int week_modulo=total_days % 365;
    int weeks = (int)(week_modulo/7);
    int days=week_modulo%7;
    printf("1343 days = %d years, %d weeks, %d days",years,weeks,days);
    return 0;
}
```

Q2:

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

```
int main()
{
    double x1,x2,y1,y2;
    printf("Input first point in format 'x,y'\n");
    scanf("%lg,%lg",&x1,&y1);
    printf("Input second point in the previous format.\n");
    scanf("%lg,%lg",&x2,&y2);
    double ans=sqrt(pow((x2-x1),2.0)+pow((y2-y1),2.0)); printf("Ans = %lf",ans);
    return 0;
}
```

Q3:

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

```
int main()
{
    float s1,s2,s3;
    printf("Type your side lengths with spaces in between.\n");
    scanf("%f %f %f",&s1,&s2,&s3);
    if((s1<(s2+s3)) && (s2<(s1+s3)) && (s3<(s1+s2)))
    {
        printf("The triangle is valid and its perimeter is %f",s1+s2+s3);
    }
    else
    {
        printf("The triangle is invalid");
    }
    return 0;
}
```

Q4:

```
#include <stdio.h>
int main()
{
    unsigned int people[20];
    for (int i=0;i<20;i++)
    {
        printf("\nType the age of the next person.");
        scanf("%d",&(people[i]));
    }
    int count=0,int baby=0,schooler=0,adult=0;
    while (count<20)
    {
        if(people[count]<5)
        {
            baby++;
        }
        else if(people[count]<18)
        {
            schooler++;
        }
        else
        {
            adult++;
        }
        count++;
    }
    printf("\nAmongst the 20 persons, %d are still babies, %d are attending school, %d are
adults.",baby,schooler,adult);
    return 0;
}
```

Q5:

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

int main()
{
    srand(time(0));
    int numberToGuess = rand()%101;
    int guess;
    for (int i = 1;i<=7;i++)
    {
        printf("Make your guess: \n");
        scanf("%d",&guess);
        if (guess==numberToGuess)
        {
            printf("You're correct!\n");
            break;
        }
        else if(i==7)
```

```
    {
        printf("Sorry, you failed to correctly guess the number within 7 tries.");
    }
    else if (guess<numberToGuess)
    {
        printf("Wrong! The number is greater than your guess.\n");
    }
    else if(guess>numberToGuess)
    {
        printf("Wrong! The number is less than your guess.\n");
    }
}
return 0;
}
```