

NAME: ZAKKA ANDERSEN RISHAMMAH

MATRIC NO: 19/ENG03/035

COURSE CODE: ENG 224 ASSIGNMENT

QUESTION 1

```
int main()
{
int days, years, weeks;
days = 1343;
    // Converts days to years, weeks and days
years = days/365;
weeks = (days % 365)/7;
days = days- ((years*365) + (weeks*7));
printf("Years: %d\n", years);
printf("Weeks: %d\n", weeks);
printf("Days: %d \n", days);
return 0;
}
```

QUESTION 2

```
int main()
{
float x1, y1, x2, y2, distance;
printf("Enter point 1 (x1, y1)\n");
scanf("%f%f", &x1, &y1);

printf("Enter point 2 (x2, y2)\n");
scanf("%f%f", &x2, &y2);

distance = sqrt( (x2 - x1)*(x2 - x1) + (y2 - y1)*(y2 - y1) );
```

```
printf("Distance between (%0.2f, %0.2f) and (%0.2f, %0.2f) is %0.2f\n", x1, y1, x2, y2, distance);
```

```
return 0;
```

```
}
```

QUESTION 3

```
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 4

```
int main()
{
    int age;
    int cnt_baby=0,cnt_school=0,cnt_adult=0;
    int count=0;
        while(count<15)
        {
            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 5

```
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;  
}
```