

CP 111 Computer Programming, 2/2554, Section B01/B02

Programming Homework 01 Solution

1. Problem name: Which_Coordinate

```
#include <stdio.h>
int main()
{
    int x,y;

    scanf("%d %d",&x,&y);

    if(x==0 && y==0)
        printf("ORIGIN\n");
    else if(x==0)
        printf("Y-AXIS\n");
    else if(y==0)
        printf("X-AXIS\n");
    else if(x>0 && y>0)
        printf("Q1\n");
    else if(x<0 && y>0)
        printf("Q2\n");
    else if(x<0 && y<0)
        printf("Q3\n");
    else
        printf("Q4\n");

    return 0;
}
```

2. Problem name: Basic_Circle

```
#include <stdio.h>
int main()
{
    double r,cf,area;

    scanf("%lf",&r);
    cf=2*3.1416*r;
    area=3.1416*r*r;
    printf("%.4f\n",cf);
    printf("%.4f\n",area);

    return 0;
}
```

3. Problem name: Deposit_Interest

```
#include <stdio.h>

int main()
{
    double deposit, deposit1, i_rate, total, x;

    scanf("%lf %lf", &deposit, &i_rate);
    deposit1 = deposit;
    total = deposit + (i_rate/100)*deposit;
    printf("%.2f\n", total);

    deposit = total;
    total = deposit + (i_rate/100)*deposit;
    printf("%.2f\n", total);

    deposit = total;
    total = deposit + (i_rate/100)*deposit;
    printf("%.2f\n", total);

    deposit = total;
    total = deposit + (i_rate/100)*deposit;
    printf("%.2f\n", total);

    return 0;
}
```

4. Problem name: Seconds

```
#include <stdio.h>

int main()
{
    int in_seconds;
    int years, months, days, hours, minutes, seconds;
    int k1, k2, k3, k4, k5;

    scanf("%d", &in_seconds);
    k1=12*30*24*60*60;
    k2=30*24*60*60;
    k3=24*60*60;
    k4=60*60;
    k5=60;
    years=in_seconds/k1;
    months=(in_seconds-(years*k1))/k2;
    days=(in_seconds-(years*k1)-(months*k2))/k3;
    hours=(in_seconds-(years*k1)-(months*k2) - (days*k3))/k4;
    minutes=(in_seconds-(years*k1)-(months*k2)
              - (days*k3) - (hours*k4))/k5;
    seconds=(in_seconds-(years*k1)-(months*k2)
              - (days*k3) - (hours*k4)- (minutes*k5) );
    printf("%d,%d,%d,%d,%d,%d,%d\n", years, months, days, hours, minutes, seconds);

    return 0;
}
```

5. Problem name: Two_Avg3s

```
#include <stdio.h>
int main()
{
    int sum,num;
    double avg1,avg2;

    sum=0;
    scanf("%d",&num);
    sum=sum+num;
    scanf("%d",&num);
    sum=sum+num;
    scanf("%d",&num);
    sum=sum+num;
    avg1=(double)sum/3;
    sum=0;
    scanf("%d",&num);
    sum=sum+num;
    scanf("%d",&num);
    sum=sum+num;
    scanf("%d",&num);
    sum=sum+num;
    avg2=(double)sum/3;

    printf("%.2f\n",avg1-avg2);

    return 0;
}
```

6. Problem name: Sort_3

```
#include <stdio.h>
int main()
{
    int x1,x2,x3;

    scanf("%d %d %d",&x1,&x2,&x3);
    if(x1 <= x2 && x2 <= x3)
        printf("%d %d %d\n",x1,x2,x3);
    else if(x1 <= x3 && x3 <= x2)
        printf("%d %d %d\n",x1,x3,x2);
    else if(x2 <= x1 && x1 <= x3)
        printf("%d %d %d\n",x2,x1,x3);
    else if(x2 <= x3 && x3 <= x1)
        printf("%d %d %d\n",x2,x3,x1);
    else if(x3 <= x1 && x1 <= x2)
        printf("%d %d %d\n",x3,x1,x2);
    else
        printf("%d %d %d\n",x3,x2,x1);

    return 0;
}
```

7. Problem name: Median_of_Three

```
#include <stdio.h>

int main()
{
    int x1,x2,x3,med;

    scanf("%d",&x1);
    scanf("%d",&x2);
    scanf("%d",&x3);
    if( (x2<x1 && x1<x3) || (x3<x1 && x1<x2))
        med=x1;
    else if( (x1<x2 && x2<x3) || (x3<x2 && x2<x1))
        med=x2;
    else if( (x1<x3 && x3<x2) || (x2<x3 && x3<x1))
        med=x3;
    printf("%d\n",med);

    return 0;
}
```