Q1. //Write a program which takes the month number as an input and display number of days in that month.

```
#include<stdio.h>
int main()
{
   int month;
   printf("enter month number(1-12)");
   scanf("%d",&month);
   switch(month)
   {
   case 1:
      printf("31 days");
      break;
   case 2:
      printf("28/29 days");
      break;
   case 3:
      printf("31 days");
      break;
   case 4:
      printf("30 days");
      break;
   case 5:
      printf("31 days");
      break;
   case 6:
      printf("30 days");
      break;
   case 7:
      printf("31 days");
      break;
```

```
    case 8:
        printf("31 days");
        break;
    case 9:
        printf("30 days");
        break;
    case 10:
        printf("31 days");
        break;
    case 11:
        printf("30 days");
        break;
    case 12:
        printf("31 days");
        break;
    default:
        printf("invalid choice");
    }
    printf("\n");
    return 0;
}
```

Q2. //Write a menu driven program with the following option.

```
//a,addition
//b.subtraction
//c.multiplication
//d.division
//e.exit
#include<stdio.h>
int main()
{
```

```
int x,a,b;
while(1)
{
   printf("\n 1.addition");
   printf("\n 2.subtraction");
   printf("\n 3.multiplication");
   printf("\n 4.division");
   printf("\n 5.exit");
   printf("\n enter your choice\n");
   scanf("%d",&x);
   switch(x)
   {
   case 1:
      printf("enter two numbers");
      scanf("%d%d",&a,&b);
      printf("addition is %d",a+b);
      break;
   case 2:
      printf("enter two numbers");
      scanf("%d%d",&a,&b);
      printf("difference  is %d",a-b);
      break;
   case 3:
      printf("enter two numbers");
      scanf("%d%d",&a,&b);
      printf("product  is %d",a*b);
      break;
   case 4:
      printf("enter two numbers");
      scanf("%d%d",&a,&b);
      printf("quotient  is %d",a/b);
```

```
        break;
    case 5:
        break;
    default:
        printf("invalid choice");
    }
    if(x==5)
        break;
  }//end of while
}
```

Q3 //Write a program which take the day number of the week and display the unique greeting message for the day.

```
#include<stdio.h>
int main()
{
  int day=1;
  switch(day)
  {
  case 1:
    printf("today is monday");
    break;
  case 2:
    printf("today is tuesday");
    break;
  case 3:
    printf("today is wedensday");
    break;
  case 4:
    printf("today is thursday");
    break;
```

```
    case 5:
        printf("today is friday");
        break;
    case 6:
        printf("today is saturday");
        break;
    case 7:
        printf("today is sunday");
        break;
    default:
        printf("invalid");
    }
}
```

Q4 //Write a menu driven program with the following option.

```
#include<stdio.h>
int main()
{
    int x,a,b,c;
    {
        while(1)
        {
            printf("\n 1.check the isoscale triangle");
            printf("\n 2.check right angle triangle");
            printf("\n 3.check equilateral triangle");
            printf("\n 4.exit");
            printf("\n enter your choice\n");
            scanf("%d",&x);
            switch(x)
                {
                case 1:
```

```
        printf("enter length of three sides of triangle");
        scanf("%d%d%d",&a,&b,&c);
            if(a==b||b==c||c==a)
                printf("triangle is isoscale");
            else
                printf("triangle is not isoscale");
                break;
    case 2:
        printf("enter length of three sides of triangle");
        scanf("%d%d%d",&a,&b,&c);
            if(a*a+b*b==c*c||a*a+c*c==b*b||b*b+c*c==a*a)
                printf("right angled triangle");
            else
                printf("not a right angled triangle");
            break;
    case 3:
        printf("enter length of three sides of triangle");
        scanf("%d%d%d",&a,&b,&c);
            if((a==b)&&(b==c))
                printf("triangle is equilateral");
            else
                printf("triangle is not equilateral");
            break;
    case 4:
        break;
    default:
        printf("invalid choice");
    }
    if(x==4)
        break;
}//end of the while loop
```

```
    }
}
```

Q5 //convert the following if-else-if construct into switch case.

```
#include<stdio.h>
int main()
{
    int var,choice;
    printf("\n 1.to check good");
    printf("\n 2.to check better");
    printf("\n 3.to check best");
    printf("\n enter your choice");
    scanf("%d",&choice);
    printf("enter the variable");
    scanf("%d",&var);
    switch(choice)
    {
    case 1:
        if(var==1)
            printf("good");
        else
            printf("not good");
        break;
    case 2:
        if(var==2)
            printf("better");
        else
            printf("not better");
        break;
    case 3:
        if(var==3)
```

```
        printf("best");
      else
        printf("not best");
      break;
   default:
      printf("invalid");
   }
}
```

Q6 //program to check whether a year is a leap year or not using switch statment.

```
#include<stdio.h>
int main()
{
   int x;
   switch(x%100==0)
   {
      case 1:switch(x%400==0)
      {
         case 0: printf("leap year");
                  break;
         case 1: printf("not leap year");
                  break;
      }
   }
         case 2: switch(x%4==0)
         {
            {
            case 0: printf("leap year");
                     break;
            case 1: printf("not a leap year");
                     break;
```

```
        }
      }
    }
```