Assignment -3 Solution

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Question -1

```c
#include<stdio.h>
int main()
{
    int n;
    printf("Enter the number : ");
    scanf("%d",&n);
    if(n>0)
    printf("Number is Positive");
    else
    printf("Number is Non-Positive");
    return 0;
}
```

Question -2

```c
#include<stdio.h>
int main()
{
    int n;
    printf("Enter the number : ");
    scanf("%d",&n);
    if(n%5==0)
    printf("Number is divisible by 5");
    else
    printf("Number is not divisible by 5");
    return 0;
}
```

Question -3

```c
#include<stdio.h>
int main()
{
    int n;
    printf("Enter the number : ");
    scanf("%d",&n);
    if(n%2==0)
    printf("Number is Even");
    else
    printf("Number is odd");
    return 0;
}
```

Question-4

```c
#include<stdio.h>
int main()
{
    int n;
    printf("Enter the number : ");
    scanf("%d",&n);
    if((n/2)*2==n)
    printf("Number is Even");
    else
    printf("Number is odd");
    return 0;
}
```

Question-5

```c
#include<stdio.h>
int main()
{
    int n;
    printf("Enter the number : ");
    scanf("%d",&n);
    if(n>99 && n<1000)
    printf("Entered no is three digits");
    else
    printf("Entered no is not three digits number");
    return 0;
}
```

Question-6

```c
#include<stdio.h>
int main()
{
    int n,n2;
    printf("Enter the two number : ");
    scanf("%d %d",&n,&n2);
    if(n>n2)
    printf(" Greatest number is %d ",n);
    else if(n2>n)
    printf("Greatest number is %d",n2);
    else
    printf(" %d",n);

    return 0;
}
```

Question-7

```c
#include<stdio.h>
int main()
{
    int a,b,c,d;
    printf("Enter the value of a b and c");
    scanf("%d%d%d",&a,&b,&c);
    d=b*b-4*a*c;
    if(d>0)
    printf("Roots are equal and real and rational");
    else if(d<0)
    printf("Roots are unequal and imiginary");
    else
    printf("Roots are real and equal ");
    return 0;
}
```

Question-8

```c
main()
{
    int year;
    printf("Enter the year");
    scanf("%d",&year);
    if(year%100==0)
        if(year%400==0)
            printf("Leap Year");
        else
            printf("Non Leap Year");
    else
        if(year%4==0)
            printf("Leap Year");
        else
            printf("Non Leap Year");
}
```

Question-9

```c
main()
{
    int a,b,c;
    printf("Enter a number ");
    scanf("%d %d %d",&a,&b,&c);
    printf("%d",  a>b ? (a>b ? a : c) :( b>c ? b : c));
}
```

Question-10

```c
main()
{
    float sell, cost,d;
    printf("Enter the selling and cost price ");
    scanf("%d%d",&sell,&cost);
    if(sell>cost)
        printf("Profit of %.1f %%",((sell-cost)/cost)*100);
    else
        printf("Loss of %.1f %%", ((cost-sell)/cost) *100);
}
```

Question-11

```c
int main()
{
    int a,b,c,d,e;
    printf("Enter the marks of five subject respectively : \n");
    scanf("%d %d %d %d %d",&a,&b,&c,&d,&e);
    if(a>=33 && b>=33 && c>=33 && d>=33 && e>=33)
    printf(" Thank You! You have passed the examination ");
    else
    printf("Try Again You have not clear any one them");
}
```

Question-12

```c
int main()
{
    char c;
    printf("Enter a any character : ");
    scanf("%c",&c);
    if(c>='A'&& c<='Z')
    printf("You have entered Uppercase");
    else
    printf("You have entered Lowercase");
}
```

Question-13

```c
main()
{
    int n;
    printf("Enter a number");
    scanf("%d",&n);
    if(n%6==0)
    printf("NO is divisible by 2 and 3");
    else
    printf("No is Not divisibke by 2 and 3");
}
```

Question-14

```c
int main()
{
    int n;
    printf("Enter a number ");
    scanf("%d",&n);
    if(n%3==0 || n%7==0)
    printf("Divisible by 3 and 7");
    else
    printf("Not divisible by 3 and 7");
}
```

Question-15

```c
int main()
{
    int n;
    printf("Enter a number");
    scanf("%d",&n);
    if(n>0)
    printf("Number is Positve ");
    else if(n<0)
    printf("Number is negative ");
    else
    printf("Number is zero");
}
```

Question-16

```c
main()
{
    char c;
    printf("Enter a nubmer");
    scanf("%c",&c);
    if(c>='A'&& c<='Z')
    printf("Character is Uppercase");
    else
            if(c>='a'&& c<='z')
    printf("Character is Lowecase");
    else
    printf("Character is special case");
}
```

Question-17

```c
main()
{
    int a,b,c;
    printf("Enter the side of a triangle : \n");
    scanf("%d%d%d",&a,&b,&c);
    if(a<b+c && b<a+c && c< a+b)
    printf("Side of a triangle is valid");
    else
    printf("Triangle is not valid");
}
```

Question-18

```c
int main()
{
    int n;
    printf("Enter the month NO :");
    scanf("%d",&n);
    if( n==2)
        printf(" Days of month is 28 and 29");
    else if(n==1 || n==3 || n==5|| n==7 || n==8 || n==10 ||n==12)
    printf("Days of months is 31");
    else
    printf("Days of months is 30");

}
```