1. Write a program to check whether a given number is positive or non positive.

ANS:-

```c
#include<stdio.h>
#include<conio.h>
int main()
{
 int x;
 printf("Enter a number :");
 scanf("%d",&x);
 x>0?printf("Positive"):printf("Non positive");
 getch();
 return 0;
}
```

2. Write a program to check whether a given number is divisible by 5 or not.

ANS:-

```c
#include<stdio.h>
#include<conio.h>
int main()
{
 int x;
 printf("Enter a number :");
 scanf("%d",&x);
 x%5==0?printf("%d is divisible by 5",x):printf("%d is not divisible by 5",x);
 getch();
 return 0;
}
```

3. Write a program to check whether a given number is odd or even.

ANS:-

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

```c
#include<conio.h>
int main()
{
 int x;
 printf("Enter a number :");
 scanf("%d",&x);
 x%2==0?printf("%d is even",x):printf("%d is
odd",x);
 getch();
 return 0;
}
```

4. Write a program to check whether a given number is odd or even without using the modulus operator.

ANS:-

```c
#include<stdio.h>
#include<conio.h>
int main()
{
    int x;
    printf("Enter a number: ");
    scanf("%d",&x);
    x/2*2==x? printf("This is even
number"):printf("This is odd number");
    getch();
    return 0;
}
```

5. Write a program to check whether a given number is a three digit number or not.

ANS:-

```c
#include<stdio.h>
#include<conio.h>
int main()
```

```
{
 int x;
 printf("Enter a number :");
 scanf("%d",&x);
 x/100>=1&&x/100<=9?printf("%d is a three digit
number",x):printf("%d is not a three digit
number",x);
 getch();
 return 0;
}
```

6. Write a program to find greater between two numbers . Print one number if both a numbers are the same.

ANS:-

```
#include<stdio.h>
#include<conio.h>
int main()
{
 int x,y;
 printf("Enter two number :");
 scanf("%d%d",&x,&y);
 if(x>y)
 printf("%d is greater",x);
 else if(x==y)
 printf("%d(both is same)",x);
 else
 printf("%d is greater",y);

 getch();
 return 0;
}
```

7. Write a program which takes the cost price and selling price of a product from user . Now calculate profit or loss percentage.

ANS:-

```c
#include<stdio.h>
#include<conio.h>
int main()
{
 float x,y,P,L;
 printf("Enter cost price :");
 scanf("%f",&x);
 printf("Enter selling price :");
 scanf("%f",&y);
 if(x>y)
 {
     L=(x-y)*100/x;
 printf("%f percent loss",L);
 }
 if(x<y)
 {
     P=(y-x)*100/x;
 printf("%f percent profit",P);
 }

 getch();
 return 0;
}
```

8. Write a program to take marks of 5 subjects from the user. Assume marks are given out of 100 and passing marks is 33. Now display whether the candidate passed the examination or failed.

ANS:-

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

```c
int main()
{
 int a,b,c,d,e,sum;
 printf("Enter your Hindi marks out of 100 :");
 scanf("%d",&a);
 printf("Enter your English marks out of 100 :");
 scanf("%d",&b);
 printf("Enter your Science marks out of 100 :");
 scanf("%d",&c);
 printf("Enter your History marks out of 100 :");
 scanf("%d",&d);
 printf("Enter your Geography marks out of 100 :");
 scanf("%d",&e);
 sum=a+b+c+d+e;
 if(sum>=165)
 printf("You scored %d out of 500\nYou are
passed",sum);

 else
 printf("You scored %d out of 500\nYou are
failed",sum);

 getch();
 return 0;
}
```

9. Write a program to check whether a given alphabet is in uppercase of lowercase.

ANS:-

```c
#include<stdio.h>
#include<conio.h>
int main()
{
```

```
char alpha;
printf("Enter  alphabet :");
scanf("%c",&alpha);
if(alpha>='A'&&alpha<='Z')
printf("Uppercase");

else
printf("Lowercase");

getch();
return 0;
}
```

10. A policy agent has to inform about the amount a client will get after maturity of the scheme. If the client comes in the age group 18 to 25 then the policy period is 30 tears, if the client comes in the age group 25 to 40 then the policy period is 20 tears and if the client comes in the age group 40 to 55 then the policy period is10 tears. Policy is not for other age groups. Clients can invest any amount lesser than or equal to 100000 but must be greater than or equal to 10000.. Rate of return is 5% using simple interest. Write a program to take age and investment amount. Print the maturity amount a client will get.

ANS:-

```
#include<stdio.h>
#include<conio.h>
int main()
{
 int x,p,r=5,t;

 printf("Enter amount :");
 scanf("%d",&p);
 printf("Enter your age :");
 scanf("%d",&x);

if (p>=10000&&p<=100000)
```

```c
{

 if(x>=18&&x<25)
 {

     t=30;
     int s=(p*r*t)/100;
     int si=s+p;
      printf("The maturity amount is %d",si);


 }

 else if(x>=25&&x<40)
 {

     t=20;
     int si=(p*r*t/100)+p;
      printf("The maturity amount is %d",si);


 }
 else if(x>=40&&x<=55)
 {

     t=10;
     int si=(p*r*t/100)+p;
      printf("The maturity amount is %d",si);


 }
 else
  printf("Sorry, no policies for you");
}

 else
 printf("Investment amount should greater than
10000 and less than 100000.");
```

```
getch();
return 0;
}
```