Type3 Function

```
1. Finding F from C (temp).
    #include<stdio.h>
    void findingf(float);
    void main()
    {
        float c,f;
        printf("\t\tEnter the Celsius: ");
        scanf("%f",&c);
        findingf(c);
    }

    void findingf(float c )
    {
        float f;
        f = ((c*9)/5)+32;
        printf("\t\tTemperature in Fahrenheit is: %f\n",f);
```

2. Finding area and perimeter of rectangle or circle.

```
#include<stdio.h>
void rectangle(int ,int );
void circle(int);
void main()
{
  int a;
  printf("Finding area and perimeter: \n 1 Rectangle \n 2 Cricle \n choose any one ");
  scanf("%d",&a);
  if(a==1)
       int l;
       int w;
       int area;
       int p;
       printf("Enter the length of rectangle : ");
       scanf("%d",&l);
       printf("Enter the width of the rectangle: ");
       scanf("%d",&w);
       rectangle(l,w);
  }else{
          if(a==2){
       int r;
       int area;
       int perimeter;
       int pai = 22/7;
       printf("enter the radius of circle : ");
       scanf("%d",&r);
```

```
circle(r);
   }
  else {
        printf("!!!!invalid option!!!!\n");
   }
  }
}
void rectangle(int l,int w)
  int area;
  int p;
area = l * w;
printf("Area of rectangle is : %d",area);
printf("\n");
p = 2 * (l + w);
printf("perimeter of rectangle is : %d ",p);
printf("\n");
void circle(int r )
int area ,perimeter;
int pai = 22/7;
area = pai * (r * r);
printf("area of circle is : %d",area);
printf("\n");
perimeter = 2 * pai * r;
printf("Perimeter of circle is : %d",perimeter);
printf("\n");
```

3. Accept a 3 digit number from user and find the sum of the digits and also reverse the number

```
#include<stdio.h>
              void reverse(int);
              void sumofdigit(int);
              void both();
              void main()
              {
                 int a;
                 int num;
                 int r;
                 int sum;
                 int nu;
                 printf("choose any one\n 1 sum of digit \n 2 reverse the number \n 3 refresh \ntype
here: ");
                 scanf("%d",&a);
                 if(a==1){
                        printf("enter the number here:");
                        scanf("%d",&num);
                        sumofdigit(num);
                        }else{
                             if(a==2){
                        printf("Enetr the number is here : ");
                        scanf("%d",&nu);
                                reverse(nu);
                             }else{
                                 if(a==3){
                                        main();
                                 }else{
                                       printf("invalid input \n");
                                 }
                             }
                        }
               void sumofdigit(int num)
               {
                 int sum;
                 int r;
                  for(sum=0;r = num \%10; num=num/10)
                  sum = sum + r;
                 printf("sum of digit is : %d \n", sum);
```

```
}

void reverse(int nu)
{
  int re;

int r;

for(re=0;r=nu%10;nu = nu/10)
  {
    re = re *10 + r;
  }
  printf("the reverse value is: %d\n",re);
}
```

4. Check if the given number is even or odd.

```
#include<stdio.h>
    void evenodd(int);
    void main()
    {
        int num;
        printf("enter the number here : ");
        scanf("%d",&num);
        evenodd(num);
    }
    void evenodd(int num)
    {
        if(num%2==0){
            printf("its even number : %d",num);
        }
        else{
            printf("its odd number : %d", num);
        }
    }
}
```

5. Calculating total salary based on basic. If basic <=5000 da, ta and hra will be 10%,20% and 25% respectively otherwise da, ta and hra will be 15%,25% and 30% respectively.

```
#include<stdio.h>
void less(int);
void other(int);
void main()
{
   int salary;
      int da,ta,hra;
   int total;
      printf("Enter the salary : ");
      scanf("%d",&salary);
      if(salary<=5000 )</pre>
```

```
less(salary);
          else{
          other(salary);
}
void less(int salary)
  int da,ta,hra;
          int total;
          da = salary * 10/100;
          ta = salary * 15/100;
          hra = salary *25/100;
          total = salary + da + ta + hra;
 printf("you get 10 and 20 and 25 percent on Ta,Da and Hra\n");
 printf("total salary on basic is : %d",total);
          printf("\n");
}
void other(int salary)
 int da,ta,hra;
          int total;
 da = salary * 15/100;
          ta = salary * 25/100;
          hra = salary * 30/100;
   total = salary + da + ta + hra;
   printf("you get 15 and 25 and 30 percent on Ta,Da and Hra \n");
          printf("total salary on basic is : %d",total);
          printf("\n");
}
```

6. Find the price of item when discount is given (specify different discount based on price)

```
#include<stdio.h>
     void fivep(int);
     void tenp(int);
     void main()
     {
        int price;
        int five;
        int total;
        int tend;
        printf("Get discount on price ");
        printf("Enter the price : ");
```

```
scanf("%d",&price);
          if(price<500)
           fivep(price);
          else
          {
          tenp(price);
                  }
}
void fivep(int price)
  int five;
  int total;
  int tend;
  five = price * 0.05;
          total = price - five;
printf(" you get 5 Percent discount ");
printf("now price is %d",total);
          printf("\n");
}
void tenp(int price )
  {
  int five;
  int total;
  int tend;
   tend = price * 0.10;
          total = price - tend;
          printf(" you get 10 Percent discount ");
          printf("now price is %d",total);
          printf("\n");
  }
```

7. Write a program to find greatest of three numbers using nested if-else.

```
#include<stdio.h>
    void findbig(int,int,int);
    void main()
    {
        int a,b,c;
            printf("\tEnter the three number here :\n");
            printf("\tEnter the First number A: ");
            scanf("%d",&a);
```

```
printf("\tEnter the second number B: ");
       scanf("%d",&b);
       printf("\tEnter the third number C: ");
       scanf("%d",&c);
       findbig(a,b,c);
}
void findbig(int a, int b, int c)
 printf("*******************************\n");
        if (a>b && a>c){
        printf("\tA is max ");
        printf("value is : %d \n",a);
        }else{
              if (b>c \&\& b>a){}
                  printf("\tB is max ");
                   printf("value is : %d \n",b);
              }else{
              if (c>b && c>a)
              printf("\tC is max ");
              printf("value is : %d \n",c);
 printf("*******************************\n");
```

8. Accept two numbers from user and an operator (+,-,/,*,%) based on that perform the desired operations.

```
#include<stdio.h>
              void add(int,int);
              void sub(int,int);
              void mult(int,int);
              void divi(int,int);
              void Rem(int);
              void main()
                int a;
                   int num1, num2;
                 printf("\t********Menu*******:\n");
                 printf("\n\t 1 Addition \n\t 2 Substraction \n\t 3 Multiplication \n\t 4 Division \n\t 5
remender \n Choose any one : ");
                 scanf("%d",&a);
                 printf("Enter the two number here :\n");
                 printf("Enter the First number: ");
                 scanf("%d",&num1);
                 printf("Enter the Second Number : ");
```

```
scanf("%d",&num2);
  if(a==1){
    add(num1,num2);
  }else{if(a==2)
           sub(num1,num2);
         }else{if(a==3)
                   mult(num1,num2);
                 }else{
                   if(a==4){
                     divi(num1,num2);
                   }else{
                    if(a==5){
                      Rem(num1);
                    }else
                    {
                      printf("invalid\n");
                   }
                 }
         }
}
void add(int num1,int num2)
{
  int total;
  total = num1 + num2;
  printf( "Addtion is : %d \n",total);
void sub(int num1,int num2)
{
  int total;
  total = num1 - num2;
  printf( "Substration is : %d \n",total);
void mult(int num1,int num2)
  int total;
  total = num1 * num2;
  printf( "Multiplication is : %d \n",total);
```

```
}
void divi(int num1,int num2)
{
  int total;
  total = num1 / num2;
  printf( "Division is : %d \n",total);
}

void Rem(int num1)
{
  int total;
  total = num1 % 10;
  printf( "Division is : %d \n",total);
}
```

9. Display a menu to the user (like 1.Even Odd 2. Basic salary etc), ask the user to enter his choice, then based on that perform the desired operations.

```
#include<stdio.h>
                void evenodd(int);
                 void calcu();
                 void cel(float);
               void findbig(int,int,int);
               void add(int,int);
               void sub(int,int);
               void mult(int,int);
               void divi(int,int);
               void Rem(int);
               void main()
               {
                int a;
                 printf("\t********Menu********:\n");
                 printf("\n\ 1 \ Even or odd \n\ 2 +-*/ \n\ 3 \ find cel \n\ 4 \ find big number \n
Choose any one: ");
                 scanf("%d",&a);
                 if(a==1){
                      int num;
                      printf("enter the number here : ");
                      scanf("%d",&num);
                      evenodd(num);
                 }else{
                      if(a==2){
                          calcu();
                      }else{
                          if(a==3){
                                printf("\t\tEnter the Celsius: ");
                                scanf("%f",&c);
                                cel(c);
                          }else{
```

```
if(a==4){
                                 int a,b,c;
                                  printf("\tEnter the three number here :\n");
                                  printf("\tEnter the First number A: ");
                                  scanf("%d",&a);
                                  printf("\tEnter the second number B: ");
                                  scanf("%d",&b);
                                  printf("\tEnter the third number C: ");
                                  scanf("%d",&c);
                                  findbig(a,b,c);
                               }else{
                                 printf("invalid \n");
                         }
                     }
                 }
              void evenodd(int num)
                 if(num\%2==0){
                     printf("its even number : %d",num);
                 }
                 else{
                     printf("its odd number : %d", num);
              }
              void calcu()
              {
                int a;
                  int num1, num2;
                 printf("\t********Menu********:\n");
                 printf("\n\t 1 Addition \n\t 2 Substraction \n\t 3 Multiplication \n\t 4 Division \n\t 5
remender \n Choose any one : ");
                 scanf("%d",&a);
                 printf("Enter the two number here :\n");
                 printf("Enter the First number: ");
                 scanf("%d",&num1);
                 printf("Enter the Second Number : ");
                 scanf("%d",&num2);
                 if(a==1){
                   add(num1,num2);
                 else if(a==2)
                          sub(num1,num2);
                        }else{if(a==3)
                                  mult(num1,num2);
```

```
}else{
                   if(a==4){
                    divi(num1,num2);
                   }else{
                    if(a==5){
                     Rem(num1);
                    }else
                    {
                     printf("invalid\n");
                   }
                 }
         }
  printf("\t*******Thank you ********\n");
void cel(float c )
{
 float f;
  f = ((c*9)/5)+32;
 printf("\t\tTemperature in Fahrenheit is : %f\n",f);
void findbig(int a, int b, int c)
 printf("**********************************/n");
        if (a>b && a>c){
        printf("\tA is max ");
        printf("value is : %d \n",a);
        }else{
              if (b>c \&\& b>a){
                   printf("\tB is max ");
                   printf("value is : %d \n",b);
              }else{
              if (c>b && c>a)
              printf("\tC is max ");
              printf("value is : %d \n",c);
}
 printf("***********************************/n");
void add(int num1,int num2)
```

```
int total;
 total = num1 + num2;
 printf( "Addtion is : %d \n",total);
void sub(int num1,int num2)
 int total;
 total = num1 - num2;
 printf( "Substration is : %d \n",total);
void mult(int num1,int num2)
 int total;
 total = num1 * num2;
 printf( "Multiplication is : %d \n",total);
void divi(int num1,int num2)
 int total;
 total = num1 / num2;
 printf( "Division is : %d \n",total);
}
void Rem(int num1)
int total;
 total = num1 % 10;
 printf( "Division is : %d \n",total);
```

10. Accept the price from user. Ask the user if he is a student (user may say yes or no). If he is a student and he has purchased more than 500 than discount is 20% otherwise discount is 10%. But if he is not a student then if he has purchased more than 600 discount is 15% otherwise there is not discount.

```
#include<stdio.h>
void nonstud(int);
void stud(int);
void main()
{
    int v;
    int price;
    int final,total;
    printf( "you are studnet ( yes(1) or no(2) ):");
    scanf ("%d",&v);
    if(v == 1)
    {
}
```

```
printf ("you are student so u will get discount \n");
                       printf("enter the price here :");
                       scanf("%d",&price);
                       stud(price);
                       }else{
                       if(v == 2){
                       printf ("you are non-student so u will get discount \n");
                       printf("enter the price here :");
                       scanf("%d",&price);
                       nonstud(price);
                       else{
                        printf("invalid option \n");
                       }
               }
                void stud(int price)
                       int final,total;
                       if(price>500)
                               final = price * 0.2;
                               total = price -final;
                               printf(" you are student and you get 20Percent off bcz price is more
than 500 \n");
                               printf("price is : %d\n",total);
                               }else
                               {
                               final = price * 0.1;
                               total = price -final;
                               printf(" you are student and you get 10 Percent off bcz of price is less
than 500 \n");
                           printf("price is : %d\n",total);
                               }
                }
                void nonstud(int price)
                       int final,total;
                       if(price>600)
                       final = price * 0.15;
                       total = price -final;
```

```
printf("price is more the 600 so u get 15 Percent discount \n");
printf("price is : %d\n",total);

}else
{
    printf("Sorry u are not valid for discount\n");
    printf("price is : %d\n",price);
}
```

11. Find the factorial of any number

```
#include<stdio.h>
    void Factorial(int);
    void main()
    {
        int num;
        printf("\nEnter the number : ");
        scanf("%d",&num);
        Factorial(num);
    }

    void Factorial(int num)
    {
        int f;
        int i=1;
        for(f=1;i<=num;i++)
        {
        f = f*i;
        }
        printf("Factorial is : %d\n",f);
    }
}</pre>
```