### WEEK 1 – C PROGRAMS

### 1.PROGRAM

```
#include<stdio.h>
int main()
{
       int a,b,i,j;
       float div, avg;
       while(1)
       {
              printf("\nEnter the number to choose the operation:\n");
              printf("[1]ADD\n");
              printf("[2]SUBTRACT\n");
              printf("[3]MULTIPLY\n");
              printf("[4]DIVIDE\n");
              printf("[5]GREATER THAN\n");
              printf("[6]LESSER THAN\n");
              printf("[7]EQUAL TO\n");
              printf("[8]NOT EQUAL TO\n");
              printf("[9]AVERAGE\n");
              printf("[10]GREATER THAN OR EQUAL TO\n\n");
              scanf("%d",&i);
              printf("\nEnter two numbers to undergo the required operation:\n");
              scanf("%d%d",&a,&b);
              div = a / (float)b;
              avg = (float)(a+b)/2;
```

```
switch(i)
       case 1:
              printf("%d + %d = %d",a,b,a+b);
              break;
       case 2:
              printf("%d - %d = %d",a,b,a-b);
              break;
       case 3:
              printf("%d X %d = %d",a,b,a*b);
              break;
       case 4:
              printf("%d / %d = %.2f",a,b,div);
               break;
       case 5:
              if(a>b)
              {
                      printf("%d > %d",a,b);
              }
              else
              {
                      printf("%d > %d",b,a);
              }
              break;
```

{

```
case 6:
       if(a<b)
       {
              printf("%d < %d",a,b);
       }
       else
       {
              printf("%d < %d",b,a);
       }
       break;
case 7:
       if(a==b)
       {
              printf("\nThe numbers are equal");
       }
       else
       {
              printf("\nThe numbers are not equal");
       }
       break;
case 8:
       if(a!=b)
       {
              printf("\nThe numbers are unequal");
       }
       else
       {
```

```
}
                      break;
              case 9:
                      printf("Average of %d and %d = %.2f",a,b,avg);
                      break;
              case 10:
                      if(a>=b)
                      {
                             printf("%d >= %d",a,b);
                      }
                      else
                      {
                             printf("%d >= %d",b,a);
                      }
                      break;
              default: printf("INVALID INPUT\n");
       }
       printf("\n\nPress 0 to perform another operation:\n");
       printf("Press any other number to exit\n");
       scanf("%d",&j);
       if(j!=0)
       {
              break;
       }
}
```

printf("\nThe number are equal");

```
return 0;
```

## **OUTPUT**

Select C:\Windows\SYSTEM32\cmd.exe

```
Enter the number to choose the operation:
[1]ADD
[2]SUBTRACT
[3]MULTIPLY
[4]DIVIDE
[5]GREATER THAN
[6]LESSER THAN
[7]EQUAL TO
[8]NOT EQUAL TO
[9]AVERAGE
[10]GREATER THAN OR EQUAL TO
Enter two numbers to undergo the required operation:
12 X 6 = 72
Press 0 to perform another operation:
Press any other number to exit
(program exited with code: 0)
Press any key to continue . . . _
```

# 2.PROGRAM

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

```
sum = x + y;
       printf("\nSum of %d and %d = %d\n",x,y,sum);
       return (float)sum/2;
}
void printeven(int x,int y)
{
       int i;
       printf("\n\nThe even numbers between %d and %d are \t",x,y);
       if(y>x)
       {
               for(i=x+1;i<y;i++)
               {
                      if(i%2==0)
                      {
                              printf("%d\t",i);
                      }
               }
       }
       else if(x>y)
       {
               for(i=y+1;i<x;i++)
               {
                      if(i%2==0)
                      {
                              printf("%d\t",i);
                      }
               }
```

```
}
       else
       {
              printf("NONE");
       }
}
int main()
{
       int a,b,c,x,y;
       float avg;
       printf("Enter any three numbers:\n");
       scanf("%d%d%d",&a,&b,&c);
       if(a>c && b>c)
       {
              x=a;
              y=b;
       }
       else if(a>b && c>b)
       {
              x=a;
              y=c;
       }
       else
       {
```

```
x=b;
y=c;
}
printf("\nThe two greater numbers are %d and %d\n",x,y);
avg = sumaver(x,y);
printf("\nAverage of the numbers %d and %d = %.2f",x,y,avg);
printeven(x,y);
return 0;
}
```

### <u>OUTPUT</u>

#### C:\Windows\SYSTEM32\cmd.exe