

**TOOBA FATIMA**

**CS#22056**

Answer 1:

**While loop:**

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

```
int main() {  
    int n,i=1,sum=0;  
    printf("enter an integer number\n");  
    scanf("%d", &n);  
    while (i<=n){  
        if (i%2 !=0) {  
            sum=sum +i;  
            printf("the odd numbers are:%d\n",i);  
        }  
        i++;  
    }  
    printf("sum f all odd number:%d\n",sum);  
    return 0;  
}
```

**FOR LOOP;**

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

```
int main() {
```

```

int n,i,sum=0;
printf("enter an integer number\n");
scanf("%d", &n);
for (i=1;i<=n;i++) {
    if (i%2 !=0) {
        sum=sum +i;
        printf("the odd numbers are:%d\n",i);

    }

}

printf("sum f all odd number:%d\n",sum);
return 0;
}

```

### **DO WHILE;**

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

```

int main() {
    int n,i=1,sum=0;
    printf("enter an integer number\n");
    scanf("%d", &n);
    do {
        if (i%2 !=0) {
            sum=sum +i;
            printf("the odd numbers are:%d\n",i);

        }

    }
}

```

```

    i++;

}
while (i<=n);
printf("sum f all odd number:%d\n",sum);
return 0;
}

```

Answer#2:

```

#include <stdio.h>

int main() {
    int i,j,k;
    for (i=1;i<=3;i++){

        for (j=3;j>i;j--)

        {

            printf(" ");

        }
        for (k=1;k<=i;k++)
        {
            printf("* ");
        }
        printf("\n");

    }
}

```

```
    return 0;
}
```

Answer#3

```
#include <stdio.h>

int main(){

    char s1[] = "default", s2[] = "default";

    printf("Enter the first string: ");

    scanf("%s", &s1);

    printf("Enter the second string: ");

    scanf("%s", &s2);

    int i;

    for(i = 0; s1[i]==s2[i] && s1[i]!='\0'; i++);

    printf("%d", s1[i] - s2[i]);

    return 0;

}
```

Answer#4

```
#include <stdio.h>

#include<ctype.h>

#include<string.

int main(){

    int i=0;

    char str[200],res[200];

    printf("Enter the string: ");

    scanf("%[^\n]s", &str);

    printf("%s\n",str);

    for(i=0;str[i]!='\0';i++)
```

```

{
    if(isupper(str[i]))
        res[i]=tolower(str[i]);
    else if(islower(str[i]))
        res[i]=toupper(str[i]);
    else
        res[i] = str[i];
}

printf("%s");
return 0;
}

```

Answer#5

```

#include <stdio.h>

int main(){
    int len, count;

    printf("Enter the length of an array: ");
    scanf("%d", &len);
    int arr[len];
    for(int i = 0; i<len; i++){
        printf("Enter element#%d: ",i+1);
        scanf("%d",&arr[i]);
    }

    printf("The unique elements in your array are:\n");
    for(int i = 0; i<len; i++){
        count = 0;
        for(int j = 0; j<len; j++)
            if(arr[i]==arr[j])

```

```
        count++;
    if(count==1)
        printf("%d ", arr[i]);
}
return 0;
}
```

Answer#6

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

```
int main(){
    struct Distance d1, d2;
    printf("Enter the ft and inch of the first distance: ");
    scanf("%d %d", &d1.ft, &d1.inch);

    printf("Enter the ft and inch of the second distance: ");
    scanf("%d %d", &d2.ft, &d2.inch);

    printf("The total distance is: %d'%d\\n", d1.ft+d2.ft, d1.inch+d2.inch);

    return 0;
}
```