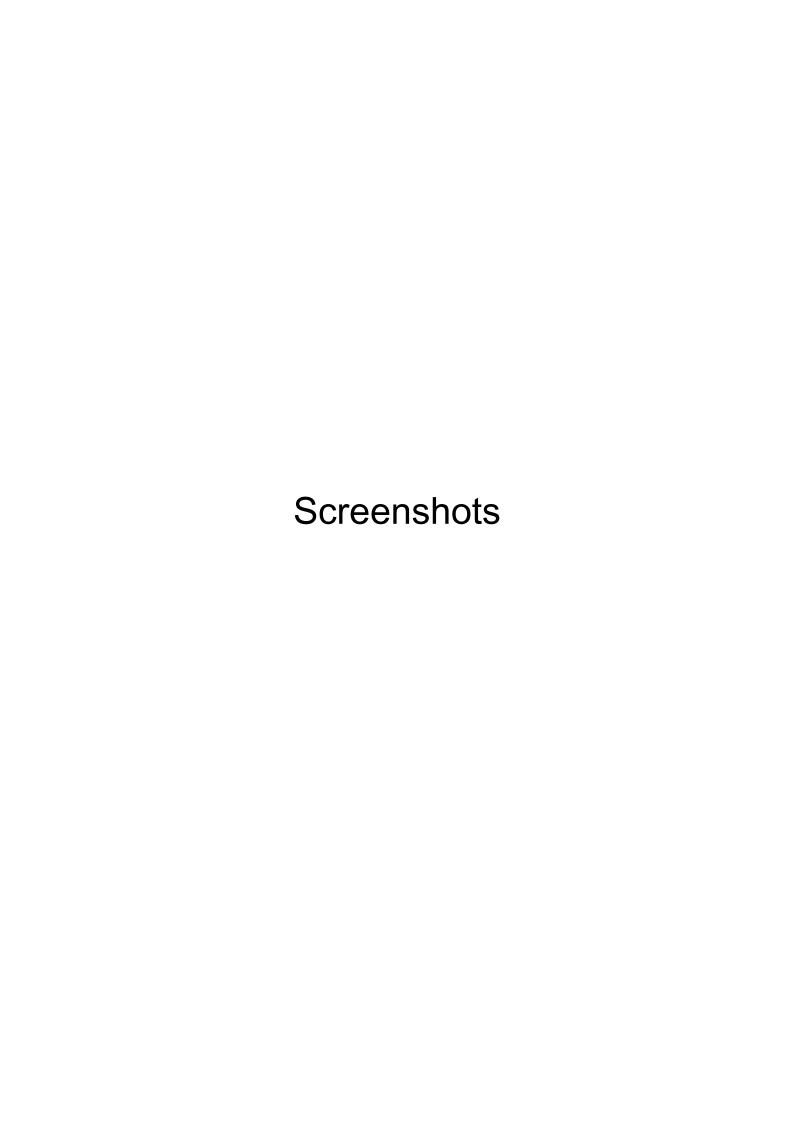Name: Muhammad Abu Bakar

Roll Number: 24k-0826

Section: BCS–1D

Week3 – PF Lab

Teacher: Sir Muhammad Aashir

Screenshots

Question-1

Answer-1) The reason is that the value assigned to the variable "testInteger" is "3000000000" which exceedes the maximum limit of data that can be stored by a variable of Integer datatype. Hence, when the program is executed the value displayed in the command prompt/terminal window that is out of the blue, an error value.

Question-2

```
C:\Windows\System32\cmd.e   ×   +   ∨

Microsoft Windows [Version 10.0.22631.4037]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Muhammad Abu Bakar\FAST'25-Uni\Fall'25-Sem1\PF-Lab Tasks\24k-0826\Week3>gcc PF-Lab-W03-Q2.c -o PF-Lab-W03-Q2.exe

C:\Users\Muhammad Abu Bakar\FAST'25-Uni\Fall'25-Sem1\PF-Lab Tasks\24k-0826\Week3>PF-Lab-W03-Q2.exe
Please enter the first number:
10
Please enter the second number:
23
The first number after swapping is: 23
The second number after swapping is: 10
C:\Users\Muhammad Abu Bakar\FAST'25-Uni\Fall'25-Sem1\PF-Lab Tasks\24k-0826\Week3>
```

Question-3

```
C:\Windows\System32\cmd.e   ×   +   ∨

C:\Users\Muhammad Abu Bakar\FAST'25-Uni\Fall'25-Sem1\PF-Lab Tasks\24k-0826\Week3>gcc PF-Lab-W03-Q3.c -o PF-Lab-W03-Q3.exe

C:\Users\Muhammad Abu Bakar\FAST'25-Uni\Fall'25-Sem1\PF-Lab Tasks\24k-0826\Week3>PF-Lab-W03-Q3.exe
Please enter the salary:
100000
Please enter the tax rate:
20
The tax to be paid is: 20000, and the salary you will have afterwards is: 80000
C:\Users\Muhammad Abu Bakar\FAST'25-Uni\Fall'25-Sem1\PF-Lab Tasks\24k-0826\Week3>
```

Question-4

```
C:\Windows\System32\cmd.e   ×   +   ∨

C:\Users\Muhammad Abu Bakar\FAST'25-Uni\Fall'25-Sem1\PF-Lab Tasks\24k-0826\Week3>gcc PF-Lab-W03-Q4.c -o PF-Lab-W03-Q4.exe

C:\Users\Muhammad Abu Bakar\FAST'25-Uni\Fall'25-Sem1\PF-Lab Tasks\24k-0826\Week3>PF-Lab-W03-Q4.exe
Please enter the fuel average of your car:
20
The fuel used for the journey is: 120
The total cost for the journey is: 14460

C:\Users\Muhammad Abu Bakar\FAST'25-Uni\Fall'25-Sem1\PF-Lab Tasks\24k-0826\Week3>
```

Question-5

```
C:\Windows\System32\cmd.e  ×    +  ∨

C:\Users\Muhammad Abu Bakar\FAST'25-Uni\Fall'25-Sem1\PF-Lab Tasks\24k-0826\Week3>gcc PF-Lab-W03-Q5.c -o PF-Lab-W03-Q5.exe

C:\Users\Muhammad Abu Bakar\FAST'25-Uni\Fall'25-Sem1\PF-Lab Tasks\24k-0826\Week3>PF-Lab-W03-Q5.exe
Please enter principal amount between PKR 100/- and PKR 1,000,000/-:
800
Please enter rate of interest between 05 percent and 10 percent:
7
Please enter time period between 1 year and 10 years:
4
The Intrest amount is: 224
C:\Users\Muhammad Abu Bakar\FAST'25-Uni\Fall'25-Sem1\PF-Lab Tasks\24k-0826\Week3>
```

Question-6

```
C:\Windows\System32\cmd.e  ×    +  ∨

C:\Users\Muhammad Abu Bakar\FAST'25-Uni\Fall'25-Sem1\PF-Lab Tasks\24k-0826\Week3>gcc PF-Lab-W03-Q6.c -o PF-Lab-W03-Q6.exe

C:\Users\Muhammad Abu Bakar\FAST'25-Uni\Fall'25-Sem1\PF-Lab Tasks\24k-0826\Week3>PF-Lab-W03-Q6.exe
The Slope is: 1.000
C:\Users\Muhammad Abu Bakar\FAST'25-Uni\Fall'25-Sem1\PF-Lab Tasks\24k-0826\Week3>
```