







“Kinetic and Potential Energy Calculator” User Guide

This document guides you in how to use the application “Kinetic and Potential Energy Calculator”.

1. Open the file “kinetic_and_potential_energy_calculator.exe” by going to the folder where that file is saved in after you downloaded it. Below shows how the file icon looks like (see the file circled in red).

| | | | | |
|---|--|-------------------|-----------------------|----------|
|  | api-ms-win-crt-time-l1-1-0.dll | 4/1/2020 1:48 AM | Application extens... | 23 KB |
|  | api-ms-win-crt-utility-l1-1-0.dll | 4/1/2020 1:48 AM | Application extens... | 21 KB |
|  | base_library.zip | 4/11/2020 7:35 PM | WinZip File | 769 KB |
|  | kinetic_and_potential_energy_calculator.exe | 4/11/2020 7:35 PM | Application | 1,474 KB |
|  | kinetic_and_potential_energy_calculator.exe.manifest | 4/11/2020 7:35 PM | MANIFEST File | 2 KB |
|  | libcrypto-1_1-x64.dll | 3/21/2020 9:05 PM | Application extens... | 2,423 KB |

2. Below shows what is initially shown when you have double clicked the application. The text in black is the path to the executable file (which might be different in your PC).

```
D:\CreativeCloudAppDev2020 Blog\Kinetic and Potential Energy Calculator\dist\kinetic_and_potential_energy_calculator\kinetic_and_potential_energy_calculator.exe
Welcome to 'Kinetic and Potential Energy Calculator' by 'CreativeCloudAppDev2020'.
This application is used to calculate kinetic and potential energies.
Kinetic energy = 0.5 * mass * (velocity ^ 2).
Potential energy = mass * gravitational field strength * height.
Enter 'KE' to calculate kinetic energy.
Enter 'PE' to calculate potential energy.
What do you want to calculate? _
```

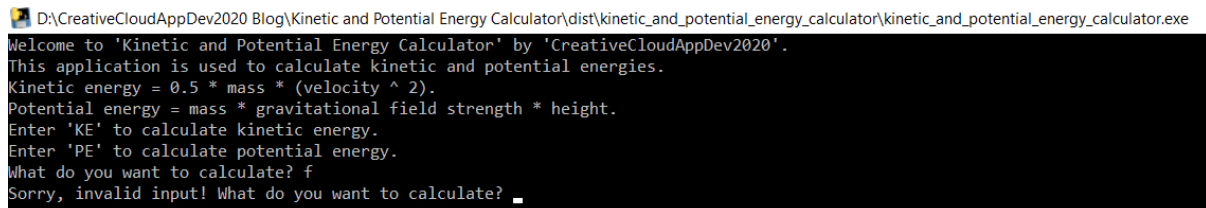
3. If you enter ‘KE’, you will be told to enter the mass and then the velocity of the item. Below shows an example of a calculation of kinetic energy.

```
D:\CreativeCloudAppDev2020 Blog\Kinetic and Potential Energy Calculator\dist\kinetic_and_potential_energy_calculator\kinetic_and_potential_energy_calculator.exe
Welcome to 'Kinetic and Potential Energy Calculator' by 'CreativeCloudAppDev2020'.
This application is used to calculate kinetic and potential energies.
Kinetic energy = 0.5 * mass * (velocity ^ 2).
Potential energy = mass * gravitational field strength * height.
Enter 'KE' to calculate kinetic energy.
Enter 'PE' to calculate potential energy.
What do you want to calculate? KE
Please enter mass of item (in kilograms): 5
Please enter velocity of item (in metres per second): 50
Kinetic energy = 6250.0 joules.
Enter 'Y' for yes.
Enter anything else for no.
Do you want to continue using 'Kinetic and Potential Energy Calculator'? _
```

4. If you enter ‘PE’, you will be told to enter the mass and then the height of the item. Below shows an example of a calculation of potential energy.

```
D:\CreativeCloudAppDev2020 Blog\Kinetic and Potential Energy Calculator\dist\kinetic_and_potential_energy_calculator\kinetic_and_potential_energy_calculator.exe
Welcome to 'Kinetic and Potential Energy Calculator' by 'CreativeCloudAppDev2020'.
This application is used to calculate kinetic and potential energies.
Kinetic energy = 0.5 * mass * (velocity ^ 2).
Potential energy = mass * gravitational field strength * height.
Enter 'KE' to calculate kinetic energy.
Enter 'PE' to calculate potential energy.
What do you want to calculate? PE
Please enter mass of item (in kilograms): 40
Please enter height of item (in metres): 160
Potential energy = 62720.0 joules.
Enter 'Y' for yes.
Enter anything else for no.
Do you want to continue using 'Kinetic and Potential Energy Calculator'? _
```

5. Entering anything else when asked “What do you want to calculate?” will show a text notifying that you gave invalid input.



```
D:\CreativeCloudAppDev2020 Blog\Kinetic and Potential Energy Calculator\dist\kinetic_and_potential_energy_calculator\kinetic_and_potential_energy_calculator.exe
Welcome to 'Kinetic and Potential Energy Calculator' by 'CreativeCloudAppDev2020'.
This application is used to calculate kinetic and potential energies.
Kinetic energy = 0.5 * mass * (velocity ^ 2).
Potential energy = mass * gravitational field strength * height.
Enter 'KE' to calculate kinetic energy.
Enter 'PE' to calculate potential energy.
What do you want to calculate? f
Sorry, invalid input! What do you want to calculate? _
```

6. The text notifying that you gave invalid input can also appear if you key in a non-number when keying in the mass, velocity, or height of item.
7. When asked “Do you want to continue using ‘Kinetic and Potential Energy Calculator’?”, entering ‘Y’ will redirect you entering what you want to calculate. Entering anything else will quit the application.